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Cost Comparison Handbook: Supplement No. 1 to OMB Circular No. A-76: Policies for Acquiring Commercial or Industrial Products and Services Needed by the Government

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COST COMPARISON HANDBOOK

Supplement No. [illegible]

to

OMB Circular No. A-76: Policies for Acquiring Commercial or Industrial Products and Services Needed by the Government

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET

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This Cost Comparison Handbook implements the cost comparison principles contained in OMB Circular A-76. The purpose of the handbook is to provide detailed instructions for developing a comprehensive and valid comparison of the estimated cost to the government of acquiring a product or service by contract and of providing it with in-house, government resources. This handbook is intended to establish consistency, assurance that all substantive factors are considered when making cost comparisons, and a desirable level of uniformity among agencies in comparative cost analyses.

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COST COMPARISON HANDBOOK

Supplement No. 1
to
OMB Circular No. A-76: Policies for Acquiring
Commercial or Industrial Products and Services
Needed by the Government

MARCH 1979

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A. INTRODUCTION

This Cost Comparison Handbook implements the cost comparison principles contained in OMB Circular A-76, "Policies for Acquiring Commercial or Industrial Products and Services Needed by the Government." Official use of this Handbook is prescribed in OMB Circular A-76, which directs Federal agencies to ensure that their comparative cost analyses conform with these instructions.

B. PURPOSE

The purpose of this Handbook is to provide detailed instructions for developing a comprehensive and valid comparison of the estimated cost to the Government of acquiring a product or service by contract and of providing it with in-house, Government resources. This Handbook is intended to establish consistency, assurance that all substantive factors are considered when making cost comparisons, and a desirable level of uniformity among agencies in comparative cost analyses.

C. BACKGROUND

The American people have a right to expect economical performance of Federal activities. Some activities are inherently governmental functions or, for other reasons, must be performed by Federal employees. Many activities, however, may be performed either by contract or by Federal employees. The choice between these alternatives must be based on a finding as to which method of performance would be more economical.

Government reliance on the private sector was first formally expressed by the executive branch as a general policy in 1955. Since then, Federal agencies have struggled to make rational judgments as to the cost considerations that should be included in a comparative analysis to establish whether the Government's interest would be served best by contract or in-house performance. Assistance was provided by OMB Circular A-76, initially issued on March 3, 1966 and revised August 30, 1967, which contained guidelines for agencies in making those analyses.

As Government cost accounting techniques progressed, it became obvious that Circular A-76 guidelines were too general to achieve desirable uniformity, and were insufficient as a basis for comprehensive cost studies. Providing more precise guidance in developing cost estimates

and analyzing comparative costs was the most prevalent suggestion made when, in 1977, agency and public comments were invited for consideration in the review and subsequent revision of Circular A-76. The proposed solution, a detailed cost comparison handbook, was widely and strongly supported by the numerous respondents to OMB's November 1977 request for comments on proposed changes to Circular A-76.

D. POLICY

Under certain circumstances, a Government agency is authorized by OMB Circular A-76 to establish in-house capability or to continue an existing activity to provide a product or service that is obtainable from a private source. One justifying circumstance is when a comparative cost analysis, prepared as provided in this Handbook, indicates that the cost of in-house performance would be lower than the cost of obtaining the product or service from a commercial or other non-Federal source. Detailed instructions for making a cost comparison are set forth in this Handbook for use by all Federal agencies. The guidelines are based on the following policy principles, quoted from the revised Circular A-76.

"9.a. Common Ground Rules

(1) Both Government and commercial cost figures must be based on the same scope of work and the same level of performance. This requires the preparation of a sufficiently precise work statement with performance standards that can be monitored for either mode of performance.

(2) Standard cost factors will be used as prescribed by the Cost Comparison Handbook and as supplemented by agencies for particular operations. It will be incumbent on each agency to defend any variations in costing from one case to another.

(3) Cost comparisons are to be aimed at full cost, to the maximum extent practical in all cases. All significant Government costs (including allocation of overhead and indirect costs) must be considered, both for direct Government performance and for administration of a contract.

(4) In the solicitation of bids or offers from contractors for workloads that are of a continuing nature, unless otherwise inappropriate,

solicitations should provide for prepriced options or renewal options for the out-years. These measures will guard against "buy-in" pricing on the part of contractors. While recompetition also guards against "buy-ins," the use of prepriced or renewal options provides certain advantages such as continuity of operation, the possibility of lower contract prices when the contractor is required to provide equipment or facilities, and reduced turbulence and disruption.

(5) Ordinarily, agencies should not incur the delay and expense of conducting cost comparison studies to justify a Government commercial or industrial activity for products or services estimated to cost the Government less than $100,000 in annual operating costs. Activities below this threshold should be performed by contract unless in-house performance is justified in accordance with paragraph 8.a. or b. However, if there is reason to believe that inadequate competition or other factors are causing commercial prices to be unreasonable, a cost comparison study may be conducted. Reasonable efforts should first be made to obtain satisfactory prices from existing commercial sources and to develop other competitive commercial sources.

(6) The cost comparison will use a rate of 10% per annum as the opportunity cost of capital investments and of the net proceeds from the potential sale of capital assets, as prescribed in the Cost Comparison Handbook.

b. Calculating Contract Costs.

(1) The contract cost figure must be based on a binding firm bid or proposal, solicited in accordance with pertinent acquisition regulations. Bidders or offerors must be told that an in-house cost estimate is being developed and that a contract may or may not result, depending on the comparative cost of the alternatives.

(2) The factor to be used for the Government's cost of administering contracts, in addition to other costs of using contract performance as specified in the Handbook, is 4% of the contract price or expected cost.

c. Calculating Costs of Government Operation.

(1) Each agency should assure that Government operations are organized and staffed for the most efficient performance. To the extent practicable and in accordance with agency manpower and personnel regulations, agencies should precede reviews under this Circular with internal management reviews and reorganizations for accomplishing the work more efficiently, when feasible.

(2) The Government cost factor to be used for Federal employee retirement benefits, based on a dynamic normal cost projection for the Civil Service Retirement Fund, is 20.4%.

(3) The Government cost factor to be used for Federal employee insurance (life and health) benefits, based on actual cost, is 3.7%.

(4) The Government cost factor to be used for Federal employee workmen's compensation, bonuses and awards, and unemployment programs is 1.9%.

d. An existing in-house activity will not be converted to contract performance on the basis of economy unless it will result in savings of at least 10% of the estimated Government personnel costs for the period of the comparative analysis.

e. A "new start" will not be approved on the basis of economy unless it will result in savings compared to contract performance at least equal to 10% of Government personnel costs, plus 25% of the cost of ownership of equipment and facilities for the period of the comparative analysis.

f. All cost comparisons must be reviewed by an activity independent of the cost analysis preparation to ensure conformance to the instructions in the Cost Comparison Handbook."

CHAPTER II - OVERVIEW OF THE COST COMPARISON PROCESS

A. GENERAL

A valid comparative cost analysis under Circular A-76 requires an accurate determination of the costs of acquiring the needed products or services from the private sector and from the existing or proposed Government commercial or industrial activity. To ensure an equitable comparision, both cost figures must be based on the same scope of work, and include all significant identifiable costs that would be incurred by the Government under either alternative.

B. INITIAL PLANNING

1. The comparative cost analysis and implementation of the conclusions reached involve the responsibilities of many functional and staff offices of the agency. For best coordination of these responsibilities, a task group should be formed by representatives of the various organizations and offices concerned, such as: the functional or operational organization, the manpower and/or personnel office, the finance and accounting office, the management analysis group (if available), the budget office, the procurement office, the legal office, and other staff functions as appropriate. The task group chairman should be thoroughly familiar with this Handbook.

2. This group should establish a plan and time schedule for orderly completion of the necessary steps to conduct the study and reach a timely conclusion to either award a contract or to continue or initiate the Government commercial or industrial activity. The schedule must allow adequate time for preparation of a comprehensive work statement, solicitation of bids or proposals, determination of in-house costs, evaluation of bids and the Government estimate, independent audit of the Government cost estimate, and review and approval of the conclusions. Close coordination with the procurement office and the personnel office is required to ensure compliance with procurement regulations and to provide maximum consideration for Government personnel who would be displaced in the event of a conversion from in-house to contract performance.

C. STATEMENT OF WORK

1. The preparation of the work statement is a critical step. It must be comprehensive enough to ensure that performance in-house or by contract will satisfy the

Government requirement. It must also serve as the basis for determining both the contract and Government cost, to ensure comparability and equity in the cost analysis. The work statement should clearly state what is to be done without prescribing how it is to be done. It should also provide performance standards to ensure a comparable level of performance with either alternative and to provide a basis for evaluation. Maximum flexibility should be permitted in staffing to permit each potential performer to propose the most efficient approach consistent with its organization and resources.

2. The work statement should describe all duties, tasks, responsibilities, frequency of performance of repetitive functions, and requirements for furnishing facilities and materials. Where the workload is variable, historical data for a representative period on workload, material and parts consumption, etc. will be provided, when available, along with the best estimate of future requirements. Bid solicitations will normally call for use of contractor facilities, unless performance on Government property is essential or would be more economical. When the work is currently being performed in a Government-owned facility or appropriate Government facilities are available, and contractor use of those facilities would be in the Government's interest, bids will be requested on that basis. Requirements regarding the proximity of the contractor's facility to the Government installation will be used only when clearly justified in terms of operational necessity to meet Government needs.

3. The work statement will be reviewed by the contracting officer to ensure that it is adequate and appropriate for a contract specification. The contracting officer will be responsible for advertising the requirement, through the Commerce Business Daily and by other means, and the functional organization will identify any known commercial sources -- this is particularly important in the case of unique products or services which have not been previously obtained from a commercial source.

D. PROCEDURE

1. When the statement of work has been completed, firm bids or proposals will be solicited. Formal advertising, with firm fixed price bids, will be used when appropriate for the requirement. Proposals may be requested for competitive negotiations when this method would be more suitable and warranted under current acquisition

regulations. It is essential that the invitation for bids or request for proposals provide for a common standard of performance to permit an equitable comparison of Government and contract costs for performing the same task. This is particularly important when the proposed contract will contain flexible pricing provisions, such as incentive or award fees. Use of the maximum incentive or award fee available would be inappropriate if it reflects a different standard of performance from the level which provided the basis for the in-house cost estimate. The contract cost figure ultimately entered in line 10 of the Cost Comparison Form (Exhibit 1) must include an estimate of the incentive or award fee that corresponds to the level of performance expected of the Government in performing the same task.

2. Concurrent with the contracting procedure, the in-house cost estimate will be prepared, based on the same work statement that is used in the contract solicitation, by completing the Cost Comparison Form in accordance with the instructions in this Handbook. When the cost analysis concerns an existing Government activity manned by civilian personnel, and the proposed staffing plan differs from the existing activity, the proposed plan must be consistent with agency manpower and personnel regulations and implementation must be initiated within 30 days after a determination is made to continue Government performance.

3. When all the costs connected with in-house performance have been estimated (lines 1 through 9, 18 through 22, and 31, if appropriate), they should be totaled and entered on line 33 of the Cost Comparison Form. The Form should then be signed and dated by the person responsible for its preparation in the line entitled, "In-House Estimate Prepared By". If the Form was prepared by a task force, the Chairman of the group should sign, indicating that he was the Chairman. The sealed in-house cost estimate must then be submitted to the contracting officer by the required submission date for bids or proposals. The confidentiality of both the in-house estimate and contract prices will be maintained to ensure that they are completely independent.

4. After the contracting officer opens the bids or completes negotiations, he will determine the lowest acceptable contract price, conducting preaward surveys as required to establish the lowest responsible and responsive bidder. The contracting officer will enter the dollar amount of the lowest responsible bid or proposal in line 10

of the Cost Comparison Form, and will return it to the preparer for completion.

5. If the contract figure in line 10 is higher than the Government's in-house estimate in line 33, the preparer may be able to make a shortened cost comparison in accordance with Chapter V.B. If, on the other hand, the contract price is less than the total in-house costs, the detailed cost comparison must be completed, giving due consideration to all types of costs which could add to or subtract from the cost of either mode of performance (Chapter V.C.).

6. After the comparison is completed and the Form is signed, it will be submitted to a qualified activity independent of the cost analysis preparation to ensure that the Government's estimated costs have been prepared in accordance with the provisions of this Handbook. If no, or only minor, discrepancies are noted during the review, the reviewing activity will execute the audit certificate and return the Form to the preparer. If significant discrepancies are noted during the review, they will be reported to the party which prepared the cost comparison. The reviewing agency should indicate the impact of the discrepancy or recommend that the preparer correct and resubmit its estimate. If the solicitation pertains to a new-start and the estimate cannot be corrected in a timely manner, the in-house figure will be rejected and the contract awarded. Conversely, if the contemplated contract pertains to an activity presently being performed in-house, and the estimate cannot be corrected within the validity date of the bids or proposals, the solicitation may be cancelled and the comparison rescheduled for a later date.

7. When the cost comparison has been audited and, with any necessary corrections, approved by the reviewing agency, the party responsible for preparing the cost comparison will originate the Decision Summary Form (Exhibit 2), including the recommendation to award a contract or to perform the work in-house. When the amount in line 35 of the Cost Comparison Form indicates that the cost of in-house performance exceeds the cost of contracting-out, the recommendation should be for contract performance. Conversely, when the cost of in-house performance is less than (under) the cost of contracting out, the recommendation should be to perform in-house.

8. The Decision Summary Form and the Cost Comparison Form will be forwarded to the approving authority for review and approval. The approving authority is an official with

responsibility for the organization in which the activity reviewed is or would be located.

9. The approving authority will send the approved Forms to the contracting officer, who will announce the results of the cost study and make available the detailed analysis to any interested parties: bidders, affected employees, and unions representing affected employees. If no significant discrepancy in the cost comparison is reported within five working days after the announcement, the contracting officer will award a contract or cancel the solicitation, as appropriate. When warranted by the complexity of the analysis, the contracting officer may extend this review period to a maximum of 15 working days.

10. If a discrepancy in the cost analysis is reported during the public review period, every effort will be made to correct it in a time frame that corresponds to the requirement and the validity date of the bids or proposals. If the analysis is for a new start, and there is a serious defect in the in-house cost estimate, the in-house figure will be rejected and a contract will be awarded. When the analysis concerns a Government commercial or industrial activity, and the discrepancies cannot be corrected within the validity date of proposals, the solicitation may be cancelled and the review rescheduled.

E. ORGANIZATION OF THE HANDBOOK

1. This Handbook (Chapters III through VI) is organized by the major subjects which must be considered in developing bottom line in-house and contract cost estimates. The significance of each topic (usually an element of cost) and related terms are discussed in sufficient detail to explain all points which must be considered, computations which must be made, and documentation which must be retained to support the cost analysis and estimates. This method of presentation is intended to allow the user to approach the specific tasks of analysis and estimating with an adequate general understanding of the type of cost under review.

2. The user's ultimate goal is to complete the Cost Comparison Form (Exhibit 1) so that an informed decision can be made and documented on the Decision Summary Form (Exhibit 2). To facilitate achieving this goal, Cost Comparison Form line numbers are referred to in the text.

3. The three appendices to the text serve three distinct purposes. Appendix 1 provides a table for

estimating the amount of federal income tax payable on the contract price, supplementing guidance on this subject in Section V.G. Appendix 2 is a glossary of pertinent terms in one alphabetical listing.

4. Appendix 3 is provided to put the entire cost comparison process in a chronological perspective. It lists the actions which must be taken to properly complete the cost comparison process, from start to finish. The party responsible for each action is noted in parentheses. Beside each numbered action is a reference to the paragraphs in the text which discuss the action in detail.

5. Appendix 3 provides an overview of the cost comparison process. However, it can also be used in initial planning, assigning specific tasks to group members, and noting progress throughout the process. Users must ensure that the actual performance of each action is consistent with the guidance provided in the referenced paragraphs of the Handbook.

Exhibit 1

(DEPARTMENT OR AGENCY)

COMPARATIVE COST OF IN-HOUSE AND CONTRACTING-OUT
PERFORMANCE OF (PRODUCT/SERVICE)

____
(Date)

LINE #	Cost Element	FIRST YEAR	SECOND YEAR	THIRD YEAR	ADDITIONAL YEARS AS APPROPRIATE	TOTAL	REFER-ENCE
		(Enter Amounts Rounded to Nearest Dollar)			(NOTE 1)		(NOTE 2)
	IN-HOUSE PERFORMANCE (CHAPTER III)						
1.	DIRECT MATERIAL						A
2.	MATERIAL OVERHEAD						B
3.	DIRECT LABOR						C
4.	FRINGE BENEFITS ON DIRECT LABOR						D
5.	OPERATIONS OVERHEAD						E
6.	OTHER DIRECT COSTS						F
7.	GENERAL AND ADMINISTRATIVE EXPENSE						G
8.	INFLATION	Not applic.					H
9.	TOTAL						
	PERFORMANCE BY CONTRACTING-OUT (CHAPTER IV)						
10.	CONTRACT PRICE						I
11.	TRANSPORTATION						J
12.	CONTRACT ADMINISTRATION						K
13.	GOVERNMENT-FURNISHED PROPERTY						L
14.	STANDBY MAINTENANCE						M
15.	OTHER COSTS						N
16.	GENERAL AND ADMINISTRATIVE EXPENSE						O
17.	TOTAL						

NOTE 1: If more than four years are involved, use another form(s) to detail the annual cost of each year and enter the total here.

NOTE 2: Attach supporting documentation as prescribed for each element of cost for which an entry is made and identify it with the established reference. Pages should be separately numbered with the prescribed alphabetic reference and in numerical sequence; e.g., A-1, A-2, A-3, etc. The entry in this column should indicate the total number of pages submitted; e.g., A-14 means reference "A" consists of 14 pages.

LINE #	Cost Element	FIRST YEAR	SECOND YEAR	THIRD YEAR	ADDITIONAL YEARS AS APPROPRIATE	TOTAL	REFERENCE
	OTHER CONSIDERATIONS (CHAPTER V)						
	ADDITIONS AND (DEDUCTIONS) TO IN-HOUSE PERFORMANCE						
	ADD:						
18.	COST OF CAPITAL						P
19.	ONE-TIME NEW-START COSTS						Q
20.	OTHER COSTS						R
	DEDUCT:						
21.	OTHER COSTS	( )	( )	( )	( )	( )	S
22.	TOTAL						
	ADDITIONS AND (DEDUCTIONS) TO CONTRACTING-OUT PERFORMANCE						
	ADD:						
23.	COST OF CAPITAL ON GOV'T-FURNISHED FACILITIES						T
24.	UTILIZATION OF GOVERNMENT CAPACITY						U
25.	ONE-TIME CONVERSION COSTS						V
26.	OTHER COSTS						W
	DEDUCT:						
27.	FEDERAL INCOME TAXES	( )	( )	( )	( )	( )	X
28.	NET PROCEEDS FROM DISPOSAL OF ASSETS (ANNUAL VALUE)	( )	( )	( )	( )	( )	Y
29	OTHER COSTS	( )	( )	( )	( )	( )	Z
30.	TOTAL						
	MINIMUM COST DIFFERENTIAL (CHAPTER VI)						
31.	NEW-START						AA
32.	CONVERSION						BB
	SUMMARY						
33.	ADJUSTED COST OF IN-HOUSE PERFORMANCE (LINE 9 $\pm$ LINE 22 + 31)						
34.	ADJUSTED COST OF CONTRACTING-OUT PERFORMANCE (LINE 17 $\pm$ LINE 30 + 32)						
35.	COST OF IN-HOUSE OVER (UNDER) COST OF CONTRACTING-OUT PERFORMANCE (LINE 33 - LINE 34)						

IN-HOUSE ESTIMATE PREPARED BY:

(Name) (Date)

(Title) (Telephone)

APPROVED BY:

(Name) (Date)

(Title) (Telephone)

PERFORMANCE RECOMMENDATION (IN-HOUSE OR CONTRACT) APPROVED BY:

(Name) (Date)

(Title) (Telephone)

COST COMPARISON PREPARED BY:

(Name) (Date)

(Title) (Telephone)

AUDIT CERTIFICATION

We have reviewed the above form and substantiated the currency, accuracy, and completeness of the data. We further verified that the procedures followed were in compliance with OMB Circular A-76 and the related Cost Comparison Handbook.

(Name) (Date)

(Title) (Telephone)

Exhibit 2

DECISION SUMMARY
FOR
IN-HOUSE OR CONTRACT PERFORMANCE
BASED ON
COST COMPARISON PER OMB CIRCULAR A-76

I. Department/Agency ____________________
Location ____________________
Function or Activity ____________________
Currently Performed In-house/by Contract ____________

II. Contract Data:
Solicitation date ________ Solicitation No. ____________
Number of bids ________ Closing date ____________

Contract proposal is for __ year(s) with options for __ year(s).
Cost comparison covered __ years, from ________, 19__ to ________, 19__.
Proposed changeover date ____________________

III. Total Adjusted Cost of In-House Performance (Line 33) ____________

Total Adjusted Cost of Contracting-Out Performance (Line 34) ____________

Cost of In-House Performance Over (Under) Cost of Contracting-Out Performance (Line 35) ____________

IV. Final Recommendation - Perform In-House ________
Contract Out ________

Prepared by:	Approved by:
/s/	/s/
(Name) (Date)	(Name) (Date)
(Title) (Telephone)	(Title) (Telephone)

V. Action of Contracting Officer:
Perform In-House ________ Bidders Notified ________
Contract Out ________ Contract No. ________
Awarded To ________

(Name) (Date)

(Title) (Telephone)

Exhibit 2. Decision Summary Form

CHAPTER III - DEVELOPING AN ESTIMATE OF GOVERNMENT COSTS

A. GENERAL

1. In order to develop the estimated cost to the Government of producing a product or performing a service, it is necessary to determine and accumulate the various elements of direct and related indirect costs. The Cost Comparison Form (Exhibit 1), will be used for this purpose. The following sections provide instructions on how to estimate the amount to be included in each cost element, classify costs by elements, and distinguish between direct and indirect costs. Also included are the requirements for documentation to support estimates for each cost element. The following definitions are particularly pertinent to these determinations:

a. Cost Objective. A function, organizational subdivision, contract, or other work unit for which cost data are desired and for which provision is made to accumulate and measure the cost of processes, products, jobs, capitalized projects, etc.

b. Final Cost Objective. A cost objective which has allocated to it both direct and indirect costs, and, in the cost accumulation system, is one of the final accumulation points. For the purpose of this Handbook, the product/service being estimated is the final cost objective.

c. Direct Cost. Any cost which can be identified specifically with a particular final cost objective. Direct costs are not limited to items which are incorporated in the end product as material or labor. Costs which can be identified specifically with a product/service are direct costs of that product/service. All costs identified specifically with other products/services are direct costs of those products/services.

d. Indirect Cost. Any cost not directly identified with a single final cost objective, but identified with two or more final cost objectives or with at least one intermediate cost objective.

2. It is important that the basic principles contained in the above definitions be understood to preclude the

possibility of "double counting" in preparing the estimate of Government costs. "Double counting" results from inconsistent treatment of a specific type of cost, generally by classifying costs of that type as both direct and indirect. The following is an example of how "double counting" can occur. Example: An agency produces products A, B, and C in the same organization, which is treated as one cost center for cost accounting purposes. A comparative analysis is being conducted to determine if one of the products could be acquired from a private commercial source at less cost. Travel costs for personnel whose time is a direct cost to product A have been charged as direct costs to that product. All other travel costs for the cost center, including travel for personnel whose time is a direct charge to products B and C, are classified as indirect. Since the total indirect cost which is accumulated for the cost center is allocated proportionately to all three products, an excessive amount of travel cost is charged to product A and the costs of products B and C are understated. The simplest way to avoid "double counting," as illustrated in this example, is to treat all travel costs as indirect, which is common practice. Alternatively, when there is some reason for charging travel as direct to one product/service, then comparable travel costs for all products/services provided by that cost center must be charged as direct.

B. MATERIAL COSTS

1. When the cost of the material that would be furnished by the Government, or by the contractor, is negligible in comparison to the cost of labor, this section and the requirement to make entries on lines 1 and 2 of the Cost Comparison Form may be disregarded. When the product or service being analyzed is the sole output from the cost center, it is not necessary to distinguish between direct and indirect material -- total material cost can be shown on line 1.

2. Direct Material Costs -- Line 1

a. Direct material costs are those incurred for such goods as raw materials, parts, subassemblies, components, and supplies that are identifiable specifically for use in producing the product or performing the service for which costs are being estimated. "Use," in this sense, means to be consumed or to be incorporated into the product.

b. Material shall be classified as direct when:

(1) it is essentially directly related to the product or service;

(2) the material cost can be measured with reasonable effort; and

(3) the material cost is significant.

c. The estimate of direct material costs begins with a review of the work statement to determine the types and quantities of material needed. Available material usage data and detailed listings of material requirements (bills of material) prepared for the same or similar work will be used to estimate the material needed. Differences between the work statement and past practice or workload in an existing Government activity must be taken into consideration, and historical material usage data adjusted accordingly. Allowance for normal scrap, spoilage, overruns, and defective work must be included. To this extent, the estimated quantity of direct material to be used will exceed the minimum necessary to meet the requirements of the work statement. A detailed listing of each type of direct material and the quantity needed will be developed and retained as supporting documentation.

d. The next step is to determine the cost of the direct material to be used. When unit prices from past purchases are used, they must be adjusted for price level changes to the time period of the first year of the comparative analysis. If there is no usable purchase history, the appropriate supply or procurement activity should be requested to estimate expected prices, using recent purchase prices, suppliers' catalogs, and other available information.

e. Pricing material from other government agencies. For purposes of the cost analysis, indirect costs associated with direct material obtained from other agencies will be added to the direct material cost and be included on Line 1 of the Cost Comparison Form.

(1) General Services Administration. In most instances, the prices charged by GSA for material do not include all the costs of the acquisition and storage functions performed by GSA. Since inclusion of some of these costs in GSA prices is not authorized by law, it will be necessary to adjust

GSA prices for purposes of Circular A-76 cost estimates. Following is a description of the material supply services provided by GSA together with mark-up rates to be applied to GSA prices to show full costs:

Wholesale and Stores Direct Delivery. This program area involves the distribution of common-use, commercially available items, to agency requisitioners worldwide, through a network of supply distribution facilities located throughout the United States. Also included is the Stores Direct Delivery Program which is designed to provide customers with the same type of items carried in stock which, because of volume orders, are procured from the vendor for direct delivery to the requisitioner in instances when delivery time is not critical. Add 21%.

Retail. The Retail Program provides the agency requisitioner with high demand common-use office and janitorial requirements from retail outlets located in areas of concentrated Federal activity. Add 36%.

Nonstores Direct Delivery and Competitive Federal Supply Schedules. This program is concerned with obtaining customer nonstock requirements through direct shipment from the vendor. Presently, agencies are ordering directly from vendors using schedules established by the GSA Federal Supply Service. Agencies pay the vendors directly for goods and services obtained. Add 5%.

(2) Department of Defense. The following definitions describe material supply services provided by the Defense Logistics Agency (DLA). The appropriate mark-up rates to be applied to DLA prices to show full costs are noted.

Wholesale Stock Fund. Material for which the Defense Stock Fund has procurement, receiving, storage, and shipping responsibility. Add 24.5%.

Direct Delivery. Material for which the Defense Stock Fund has procurement

responsibility only, and which is delivered directly to the customer from the vendor. Add 13.4%.

(3) Other agencies. The furnishing agency must be requested to determine the indirect costs of acquiring, managing, and storing the material. These indirect costs will usually be presented as a percentage of direct costs. For guidance in identifying the costs, the furnishing agency may use the instructions on Material Overhead in section III.B.3. of this Handbook.

f. The supporting documentation for the costs estimated for direct material is summarized in Figure 1. The material items, quantities, prices, supporting calculations, and sources of information must be indicated.

FIGURE 1.

ESTIMATE OF DIRECT MATERIAL COSTS

Item Nomenclature (1)	National Stock Number (2)	Quantity: Quantity per Bill of Mat. or Specifications (3)	Quantity: Adjustment 1/ (4)	Quantity: Final Est. Quantity (5)	Cost: Unit Purchase Price (6)	Cost: Source of Unit Price (7)	Cost: Adjustment 1/ (8)	Cost: Final Est. Unit Price (9)	Direct Material Cost (5)X(9) (10)	Source of Supply (11)
Widget	6730001161618	120	30 a/	150	$11.00	GSA Cat. c/	.55 b/	$11.55	$ 1,732.50	GSA
Socket	None	60	5 a/	65	15.00	Pur. Dept.	.75 b/	15.75	1,023.75	PM, Inc.
Frontam	3760008161611	500	50	550	57.00	Inventory	3.30 b/	60.30	33,165.00	ABC Corp.
TOTAL COST									$35,921.25	

NOTE: 1/ Explain basis for adjustment.
a/ Normal spoilage.
b/ Estimated price change.
c/ Price list dated October 1, 1978.

3. Material Overhead -- Line 2

a. In addition to the basic cost of the material to be used, there are additional costs incurred in acquiring, handling, storing, and controlling the material which must be identified and included in the cost of performance. When the cost center acquires material for more than one product/service, these overhead costs are determined for all the material acquired and then allocated proportionately to each product/service. For material acquired from other Government agencies, however, the indirect material cost incurred by other agencies is added to the direct cost of the material rather than adding it to the material overhead cost pool of the using activity.

b. Functions that are normally included in the material overhead cost pool are described below:

(1) Acquiring. Includes the efforts related to determination of material needs, ordering and/or purchasing of material to meet the needs, and incoming transportation costs (when separately identified). Do not determine and include the costs of transportation provided by the supplier and included in the supplier's price; these costs are included in the direct cost figures.

(2) Handling. Includes all efforts involved in receipt, storage, and issuance of materials. These efforts include: physical receipt, unpacking, inspection, testing, preserving (when required), placing in storage, protecting, assembly and disassembly of "sets" or "kits" when required, removal from storage, and preparation for use (including depreservation when required). The cost of losses and damage during handling and storage is also included.

(3) Controlling. Includes all efforts involved in monitoring and documenting material acquisition, handling, and distribution. Specific activities covered by this function include physical inventory, maintenance of records and documentation of material on hand and on order, and records of material distributed.

c. Costs of these functions must be estimated for the first year of the cost analysis. Estimates will include all costs for efforts that benefit or are caused by these functions, such as assigned personnel, immediate supervision, material and supplies, the cost of ownership

(depreciation) of equipment and facilities, purchased services (such as special tests during receipt or storage), utilities, etc.

d. When the total amount of material overhead cost is determined, it is necessary to allocate the proper portion to the product/service for which the estimate is being prepared. In most cases, an equitable allocation can be obtained by developing a material overhead rate based on the total cost of material acquired by the cost center.

e. The material overhead rate will normally be expressed as a percentage of total material cost, computed by dividing the material overhead cost by total material cost. In making this computation, it is necessary to include in the base all costs of direct material for all products/services by all other work centers, and all indirect material included in operations overhead pools and general and administrative (G&A) expense, as determined later. The material overhead cost to be charged to a product/service is calculated by multiplying the material overhead rate times the direct material charged to that product/service and entering the result on line 2. The development of a material overhead rate is illustrated in Figure 2. Material overhead must also be applied to indirect material issues.

f. While the use of total material cost as an allocation base will generally be satisfactory, there could be cases where the relationship between material overhead and the individual products/services is better represented by some other characteristic of the material. In such cases, allocation can be based on volume, weight, quantity, or number of receipts or issues for any or all of the types of materials involved. When more than one allocation base is used, more than one overhead pool will be required, and care must be exercised to ensure that no applicable cost is omitted, counted twice, or inappropriately allocated.

FIGURE 2
MATERIAL OVERHEAD

Description	Estimated Cost For the Year Ending ________
Salaries and Wages	
Labor	$ XXX,XXX
Fringe Benefits on above	XX,XXX
Travel	XX,XXX
Operating Supplies	XX,XXX
Maintenance	XX,XXX
Stationery, Printing & Office Supplies	XX,XXX
Utilities	XX,XXX
Depreciation	XX,XXX
Rent (SLUC)	XX,XXX
Allocated Amounts of Centrally Performed Functions1/	
Purchasing2/	XX,XXX
Receiving	XX,XXX
Others (list separately)	X,XXX
Total Material Overhead Expense (A)	XXX,XXX
Total Material Costs (B)	XX,XXX,XXX
Material Overhead Rate (A) ÷ (B)	________

1/ Attach details of allocation. That is, what rate was used and how the rate was determined.
2/ This centrally performed purchasing is local/retail level purchasing performed for the activity producing the product or performing the service. Centralized wholesale level purchasing or contracting performed for all activities agency-wide is part of contract administration.

C. PERSONNEL COSTS

1. Direct Labor -- Line 3

a. Direct labor cost is that portion of wages or salaries which can properly be identified with and charged only to one specific product or service (final cost objective). Costs are either direct or indirect only. As discussed previously in regard to "double-counting," labor costs of a type treated as direct for the product/service being estimated must also be considered as direct costs of other final cost objectives and not included in an indirect cost pool. Conversely, no final cost objective shall have charged to it as a direct labor cost a portion of any labor

costs the remainder of which is included in an indirect cost pool.

b. Labor shall be classified as direct when:

(1) it is essentially directly related to the product or service;

(2) the labor cost can be measured with reasonable effort; and

(3) the labor cost is significant.

c. Direct labor costs are composed of two factors: the first is the time it takes to do the job, and the second is the rate(s) of pay for the labor skills required. These two factors are equally important and each must be estimated as precisely as possible. For this reason, they are treated separately in the following paragraphs.

d. In estimating the time required to perform a service or produce a product, the starting point is the statement of work. When the estimate is being made for a product/service presently being provided by the Government, and agency management considers that authorized staffing is proper for efficient operation, the number of nonsupervisory positions authorized may be used to estimate the number of man-years of direct labor required. For all other cases, including proposed "new starts," a thorough review of the work requirements should definitize the outputs requiring labor. The time required to perform these outputs can be estimated by utilizing prior experience if it is available, engineering standards, or engineering estimates. If similar jobs have been completed, the direct labor hours of those jobs may be used as a basis for subsequent job estimating, provided appropriate adjustments are made for any scope and procedural changes. Also, when estimating the direct labor hours, include all on-the-job training which involves productive work. Time spent on all other training will be treated as indirect labor and included in the appropriate overhead pool.

e. When time requirements are expressed in man-hours, they can be converted to man-years by dividing the total man-hours required by either the total number of working hours in a year (i.e., 52 x 40 or 2,080) or by the number of hours normally worked in a year (i.e., 2,080 less leave and holiday time). It is important to know how the man-years were developed to determine whether the labor rate to be

applied to the time estimate should be increased to provide for leave and holidays to be earned and taken by the workers. If the time estimate includes a provision for leave and holidays, the rate by which such a time estimate is to be multiplied should not be increased to provide for these costs, and vice versa. Additional comments in this regard are contained in the following paragraphs dealing with the rate of pay to be applied to the time estimates and in the examples at the end of this section.

f. When the number of hours of each type of labor are identified, they must be multiplied by the appropriate hourly rate in order to arrive at an estimate of direct labor costs. The skill requirements determined to be needed for performance (and thus for developing times estimates) will dictate the basic rates to be used. Normally, the skills required will specify a Wage Board (WB) or General Schedule (GS) level. When computing costs for an existing Government activity, use the actual rates for current employees. For positions that are not occupied, or for a proposed new start, use salary step 5 for GS positions and wage step 3 for Wage Board positions. When a salary increase for Government employees is expected during the first year of performance, the amount of the increase should be included in the direct labor estimate.

g. Wage Board rates are normally expressed as hourly rates. These are called the basic hourly rates and will be applied to all hours worked and to all hours of annual leave earned, and sick, holiday and other leave taken to ascertain the total pay of a Wage Board employee. If night and/or environmental differential pay will be required, these differentials should also be included in the direct labor cost for Wage Board employees. Premium pay for Federal civilian firefighters and law enforcement officers is also to be included. Excluded are bonuses, allowances, and overtime and holiday premium pay.

h. General Schedule rates are normally expressed as annual rates of pay. Night and post differentials are excluded from this annual rate for GS employees. In order to convert this annual rate to an hourly rate comparable to that of a Wage Board employee, it must be divided by 2,080 hours.

i. Based on Civil Service Commission data, a factor of 18% must be added to the basic hourly pay to compensate for the amount of annual leave earned and sick leave, holiday, and other leave taken. In computing direct labor costs when

stated time requirements do not include allowances for leave and holiday time, this factor must be used. As indicated earlier, the factor may be applied to either the basic labor rate or the time estimate. Because of this, care must be taken that the 18% factor not be included in or excluded from both. The following decision diagram illustrates the proper rate to be applied to the time estimate.

TIME ESTIMATE REPRESENTS	LABOR RATE TO USE
Estimated hours required to do the job.	Basic hourly rate increased by the factor for leave and holidays (i.e., base pay x 118%).
Estimated hours required to do the job, plus the allowance for leave and holidays (i.e., actual hours x 118%).	Basic hourly rate.
Estimated man years of effort, including leave and holidays to be taken.	Annual rate, or basic hourly rate x 2,080.

j. The detail necessary to support the estimate of direct labor costs will be a listing of the various labor skills required, and the number of hours and rate of pay for each job or component contained in the statement of work as illustrated in Figure 3.

FIGURE 3

ESTIMATE OF DIRECT LABOR COSTS

(Examples of Typical Entries)

Line Item	Skill Required	Req. Hrs.	Basic Hourly Rate	Hourly Rate Based on Annual Salary	Annual Salary	Direct Cost W/O Leave & Holiday (Required Hours X Applic. Rate)	Leave & Holiday (18%)	Total Direct Labor Costs
Repair Electric Meters	Electrician W/B-4	200	$11.00	$ -		$2,200.00	$396.00	$2,596.00
Install Meter Mounts	Carpenter W/B-3	100	11.50	-		1,150.00	207.00	1,357.00
Install Water Coolers	Carpenter's Helper	100	7.00			700.00	126.00	826.00
Inspection	Inspector GS 9/2	100	-	7.21 ($15,000÷2,080 hours=$7.21)		721.00	129.78	850.78
Reliability Improvement Engineering	Engineer GS 12/2	1 Man Year*	-	-	$23,000	-	-	$23,000.00**

* Includes leave and holiday but excludes other fringe benefits.

**Annual salary already includes leave and holiday.

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2. Fringe Benefits -- Line 4

a. Fringe benefits are allowances and services provided by the Government to its employees as compensation in addition to the wages or salaries used in determining the basic hourly rate or the annual rate of pay. For purposes of estimating the cost of a Government operation, fringe benefits will include only the normal, recurring benefit costs attributable to an on-going operation. Costs such as termination and separation allowances of Government personnel displaced by a contractor operation are not fringe benefits but rather are to be included as termination costs in comparing Government costs and contractor costs. Employee relocation allowances provided to Government personnel shall be included in Government start-up or termination costs, as applicable, when associated with the opening or closing of a Government-operated activity. (Termination costs should be reflected in the cost analysis under one-time conversion (Line 25) or new-start (Line 19) costs.)

b. The following guidance has been developed to facilitate estimating fringe benefits applicable to the basic hourly pay and the annual rate of pay of Wage Board and General Schedule employees. In cases where certain employees receive fewer or additional benefits, special computations will be needed.

c. In determining direct labor costs, leave and holiday time is considered as being included. Therefore, they are not included in fringe benefits. Premium pay for working on holidays is discussed under "Additional Benefits."

d. Standard Fringe Benefit Factors. Government-wide percentage factors shall be applied to annual or periodic labor costs to determine the following fringe benefit costs:

(1)	Retirement and Disability (for employees under Civil Service Retirement)	20.4%
(2)	Health and Life Insurance	3.7%
(3)	Other Benefits (including work disability, unemployment programs, bonuses and awards, etc.)	1.9%

e. FICA. For Government civilian employees (normally temporary employees) who are not under the Civil Service Retirement System, the Social Security (FICA) cost factor to

be applied to salary or wage costs is the actual employer contribution rate for the employees involved. When estimating the FICA cost, care must be exercised to assure that the FICA rate is applied only to wages and salaries subject to the tax. Information regarding FICA tax rates and maximum salaries and wages to which they are applicable should be obtained from the appropriate personnel office.

f. Additional Benefits

(1) If the Government employees whose time is included in the cost estimate will receive allowances for off-site pay, location allowances, hardship pay, hazardous duty pay, uniform allowances, incentive pay, cost of living differential, night differential for General Schedule employees, etc., an estimate of the actual costs thereof will be used to develop individual rates for the local area. Information needed to compute rates involved should be obtained from the cognizant personnel or payroll office. Where allowances are not uniformly distributed among all local personnel, it may be necessary to compute separate rates or amounts for individual employees or employee groupings, such as General Schedule employees and Wage Board employees.

(2) Overtime premiums and premium pay for working holidays are not included as additional benefits. Overtime and holiday premiums are either "indirect costs" (to be included in the appropriate indirect cost pool), or "other direct costs." In either case, they are not included in the determination of additional benefits nor in the total annual or periodic labor costs. Overtime and holiday premiums are direct costs only when it is known that the work required to provide the product/service being estimated must be performed on overtime. Otherwise, overtime and holiday premiums are indirect costs since the incurrence of overtime provides equal benefit to all work scheduled. Although night and environmental differentials are considered additional benefits for General Schedule employees, they are added to the hourly rate and included in the annual or periodic labor costs for Wage Board employees. Fire fighters and law enforcement officers' premiums are also included in the annual or periodic labor costs in the same manner.

g. Documentation. The backup material for the amount shown as fringe benefits applicable to direct and indirect labor shall be a detailed summary of each fringe benefit, supported by a schedule showing the computation of each

fringe benefit cost. The computation schedule should include the base costs to which fringe benefit factors are applied and their source(s), as well as the rate factors and their source(s) (except for the standard factors provided). Normally, a single fringe benefit factor may be used for both direct and indirect labor. However, if significant differences exist in their composition, different fringe benefit rates will have to be calculated separately for direct labor costs and for indirect cost pools. A sample schedule is shown in Figure 4.

FIGURE 4

FRINGE BENEFITS

	Annual or Periodic Labor Costs				
	SUBJECT TO RETIREMENT1/	SUBJECT TO FICA UNDER LIMIT	SUBJECT TO FICA OVER LIMIT	TOTAL	FRINGE BENEFIT AMOUNTS
DIRECT LABOR	$6,800,000	$170,000	$30,000	$7,000,000	
INDIRECT LABOR INCLUDED IN:					
MATERIAL OVERHEAD	1,980,000	17,000	3,000	2,000,000	
OPERATIONS OVERHEAD	2,984,000	16,000	-	3,000,000	
G&A EXPENSE	4,000,000			$ 4,000,000	
TOTAL	$15,764,000	$203,000	$33,000	$16,000,000	

RETIREMENT AT 20.4% of $15,764,000	$3,215,856
FICA at 6.13% of $203,000	12,444
HEALTH, LIFE INSURANCE AND OTHER BENEFITS AT 5.6% of $16,000,000	896,000
TOTAL STANDARD FRINGE BENEFITS	$4,124,300
ADDITIONAL FRINGE BENEFITS (List and Explain)	1,906,949
TOTAL FRINGE BENEFITS	$6,031,249

CALCULATION OF FRINGE BENEFIT RATE

TOTAL FRINGE BENEFITS ÷ TOTAL ANNUAL OR PERIODIC LABOR COSTS = $\frac{\$\ 6,031,249}{\$16,000,000}$ = 38%

ENTRIES ON COST COMPARISON FORM

LINE 4 - $7,000,000 DIRECT LABOR x 38% = $2,660,000

LINES 2, 5, AND 7 - THE FRINGE BENEFITS TO BE INCLUDED IN THE OVERHEAD POOLS ARE 38% OF $2,000,000, $3,000,000 AND $4,000,000, RESPECTIVELY. THE PRORATA SHARE OF EACH OF THESE POOLS IS TO BE ENTERED IN THE APPROPRIATE LINE.

1/ See Subchapter S.14, "Computation of Annuities," Federal Personnel Manual.

D. OPERATIONS OVERHEAD -- Line 5

1. General

Operations overhead is one of the three classifications of indirect costs. The other two, material overhead and general and administrative (G&A) expense, are discussed in separate sections. This section deals only with operations overhead.

2. Definition

a. Operations overhead costs are the indirect costs of an annual fiscal period which are necessarily incurred to produce or deliver the products/services being provided by a particular organizational element (hereinafter referred to as a work center). Operations overhead differs from material overhead costs which are related only to acquiring, handling, and storing material, and from general and administrative expenses which are those costs whose incurrence benefits all the activities of the organization of which the particular work center is a part.

b. For practical reasons, some minor costs are treated as indirect costs even though a direct cost relationship can be determined. Short-term work efforts and small, inexpensive items of material generally fall in this category. They should be included in the overhead pool which is most closely related to the nature of the costs; i.e., material overhead, operations overhead, or general and administrative expense. It is important, however, that all costs incurred for the same purpose in like circumstances be treated consistently as either direct costs or indirect costs with respect to the final cost objective (i.e., the product or service being provided by the work center).

3. Estimating Operations Overhead Costs

a. Step One. The first step in estimating operations overhead costs is to determine the work center(s) which will perform the work necessary to provide the product/service being estimated. Once this determination is made, all of the estimated costs related to the elements of expense of that work center must be classified as either direct or indirect costs. (Refer to the applicable sections for each element of expense.) The following table illustrates the final result of such a classification.

TOTAL ESTIMATED COSTS TO BE
INCURRED BY
WORK CENTER "A"
DURING
FISCAL YEAR 197X

Direct Costs		$9,000,000
Indirect Costs		
Operations Overhead	$4,500,000	
Material Overhead	-0- *	
General & Administrative Expense	-0- *	
Total Indirect Costs		4,500,000
Total Annual Costs		$13,500,000

* While it is possible to incur some of these types of costs in Work Center "A", for purposes of this illustration it is assumed that none will be.

b. Step Two. The summary amount of operations overhead shown in the illustration in Step One represents the total cost of the individual types of expenses involved. To arrive at this amount, it is necessary to estimate the amount of the individual types of expenses. As a general rule, where the product or service is to be provided by an existing work center, historical records of the amounts and types of indirect costs incurred by it will be available. These historical records may be used as the basis for developing an estimate of the indirect costs to be incurred during the first year in which the product or service is to be provided. They should be adjusted to reflect inflation and any other changes in staffing or operations contemplated by management. If the product or service being estimated represents a new start, the statement of work will be the fundamental document on which the estimate will be predicated. Once the requirements of the statement of work are determined, it may be possible to find a work center within the organizational structure that is similar to the one required. The indirect costs of that similar work center, appropriately adjusted, would be an acceptable basis for developing the estimate of the costs of the individual elements of expense. If neither an existing nor similar work center is available, then the annual amounts of the individual items of indirect costs necessary to accomplish the statement of work should be estimated in consultation with cognizant management and technical personnel.

4. Types of Operations Overhead Expenses A description of the more common types of operations overhead expenses are discussed in the following paragraphs.

a. Indirect Labor - This category includes all personnel costs of the work center not considered as direct labor, material overhead, or general and administrative expense, as defined in the sections dealing with those costs. The costs of supervision and administration within the work center, as well as the costs of the time of direct employees on leave or not spent in productive effort (e.g., idle time, training, etc.) should be included. Care must be taken to ensure that indirect labor costs that are more appropriately classified as material overhead or general and administrative expense are not included in the operations overhead. Indirect labor costs should include all applicable fringe benefit costs (see Figure 2). Estimates of and supporting documentation for indirect labor should be prepared in much the same way as for direct labor. Essentially, positions required by the work center identified as providing the product/service are identified and designated as direct or indirect. Once the designation is made, it must be consistently followed. The salaries and wages of the indirect employees are estimated for the first year of performance.

b. Indirect Materials and Supplies - Included in this category are those items of material or supplies utilized by the work center in its operations but which are not chargeable as direct materials as defined in section III.B.1. Included in indirect material cost is the applicable material overhead.

(1) Examples of such items are lubricants and rags for equipment, or common use low-cost fasteners, such as wire, staples and screws. The costs of indirect materials and supplies should include their allocable share of material overhead. Estimates of indirect materials and supplies are determined in much the same manner as those for direct materials. The prices for these types of materials and supplies are estimated and total indirect material and supply costs determined.

(2) If it is not practical to list each single item of indirect material and supplies in the documentation supporting the estimated amount, they may be aggregated into logical subgroupings and shown in total, with a reference to where the detail can be examined. If the amounts of indirect material and supplies are estimated

other than by a detailed listing, a clear explanation of the method used to arrive at the estimated amount must be contained in the supporting documentation.

c. Depreciation - Depreciation is the method used to spread the cost of tangible capital assets (plant, machinery, etc.) less residual value, over their estimated useful lives in a systematic and logical manner. Note that because land has an unlimited life, it is not a depreciable asset and its cost should not be included with other asset costs that are subject to depreciation. Land improvements, however, are depreciable assets (e.g., roads, parking lots). For purposes of this Handbook, depreciation will be computed on a straight-line basis. That is, an equal amount of the difference between the acquisition cost of the asset and its residual value should be charged to each accounting period or unit of usage covered by its useful life.

(1) The cost of a tangible capital asset includes the original acquisition cost plus the transportation and installation costs incurred to place the asset in use. Additions need to be added and retirements deleted to keep the costs current.

(2) Useful life refers to the estimated period of economic usefulness of the asset in a particular operation as distinguished from its physical life. Determination of the asset's useful life should be based on actual or planned retirement and replacement practices. An asset that is still in use should not be reflected as being fully depreciated. To avoid this happening, the estimated useful lives need to be reviewed and adjusted periodically to conform to current plans.

(3) Residual value is defined in Appendix 2. Because useful life and physical life may differ, the residual value is not always equal to scrap value. Both the useful life and residual value should be estimated, based on historical records and in consultation with engineering and management personnel.

(4) One example of calculating depreciation involves an asset which costs $1,000 and had a residual value of $100 and a useful life of 10 years. $90 should be charged to each year's operation during its useful life ($1,000 - $100 = $900 ÷ 10 years = $90/year).

(5) In another example, where depreciation is to be based on hours of usage, the difference between the cost and residual value would be divided by the estimated number of hours the machine will be used during its useful life to arrive at an hourly depreciation rate. The amount of depreciation to be included in the operations overhead pool would be the product of the number of hours that the machine will be used during the year, multiplied by the hourly rate previously described, as illustrated below

Acquisition Cost	$1,000
Residual Value	-100
	$ 900
Estimated usage during useful life	5,000 hours
Depreciation Rate ($900 ÷ 5000 hours)	$ 0.18/hour
Estimated usage during year	500 hours
Depreciation to be included (500 hours x $0.18 hour)	$ 90

(6) The annual depreciation related to all the tangible capital assets (building, plant, equipment, etc.) used by the work center in providing the product/service being estimated will be included in the work center operations overhead costs.

(7) For all other assets the indirect cost pool (material overhead, operations overhead, or general and administrative expense) to which annual depreciation is assigned will depend on the use made of the assets.

(8) Supporting documentation for the estimated amount of depreciation should be a detailed listing of the assets involved and the annual depreciation related to each. Where, because of the magnitude of the assets involved, it would not be practical to prepare such a list, the amount of depreciation may be supported by a listing of logical groupings by type of assets, with references to where the detailed supporting property records may be examined. If depreciation is estimated on other than an item-by-item basis, a complete explanation of the methodology used must be included in the supporting documentation.

d. Rent - This is a cost incurred for the use of another entity's tangible assets (land, plant and machinery, etc.) in providing the product/service being estimated. All such costs anticipated to be incurred during a fiscal year encompassing the period of performance should be included in the operations overhead pool unless the assets are used in connection with only one product/service. In the latter case, the rental amounts will be treated as a direct cost of that product/service, provided that the rental amounts of similar assets are treated consistently for all other products/services. The amount of rent and the charges included must be determined.

(1) If the rent includes a separate charge for maintenance and repair, utility charges, etc., and the amount is significant, those charges should be included in their proper expense classification, if they do not benefit all products or services in the same proportion as the rental charge.

(2) Where a Government-owned asset is "rented" by one Government organization, from a different Government organization, only the actual costs of ownership should be regarded as cost. If the rental amount is predicated on the market rental value, or an incremental cost basis, there may be a significant difference between the rental amount and the cost of ownership. If the rental amount to be included in the estimate represents a GSA-billed Standard Level User Charge (SLUC) and is in excess of $50,000 annually, a determination of this difference will be made. The difference will be either added to or subtracted from the "rental" costs to bring them to the actual costs to the Government. If the rental costs are based on incremental costs, the difference will be determined regardless of their amounts. If it is impractical to arrive at actual Government ownership costs by consultation with the Government lessor, a reasonable estimate of ownership costs will be included.

e. Maintenance and Repair - The normal costs incurred during a fiscal year for maintaining and repairing the tangible capital assets utilized by the work center providing the product or service being estimated (but not those properly classified as material overhead or general and administrative expense) will be included in the operations overhead cost pool. These costs relate only to those maintenance and repair activities that are necessary to keep the buildings and equipment in operating condition.

The costs of major overhauls and repairs which add value to or prolong the life of the asset should be treated as capital expenditures and depreciated over the extended or remaining useful life of the asset. The methodology used to estimate all of these costs should be contained in the supporting documentation.

f. Support Costs - This category includes those indirect costs incurred during the fiscal year by other organizational elements in support of the work center in which the product/service being estimated is to be performed.

(1) For example, motor pool services in support of the products or services provided by the work center would be included in operations overhead. Support costs applicable to material overhead or general and administrative expense should not be included in operations overhead (e.g., ADP services involving material inventory or general management information), but should be included in those accounts.

(2) Supporting documentation for these costs should indicate the service involved and the performing organization. If significant in amount, the organization supplying the support should estimate the costs in accordance with the provisions of this Handbook and provide the estimate and supporting documentation to the recipient work center for inclusion in its estimate. If the amount is not considered significant enough to warrant preparation of an estimate as described above, the methodology used to arrive at the estimate must be clearly stated in the supporting documentation.

g. Utilities - This category includes charges for fuel, electricity, telephone, water and sewage services, etc. The amount of these costs applicable to the work center will be determined either on a metered or allocated basis of consumption. Proration of the amounts to the various overhead pools will be by a unit of measure that would vary directly with consumption (e.g., floor space, number of telephones, etc.). Estimates of these expenses to be incurred for the first year of performance should be based on current experience appropriately adjusted for anticipated future experience. Engineering estimates should be used when experience data are not available. All estimates should be appropriately documented with supporting detail.

h. Insurance - Operation of any government activity involves risks and potential costs from fire and casualty losses and from liability claims. These risks are normally covered by insurance in the private sector, but the Government is primarily self-insured and must pay for such losses as incurred. Casualty losses can be estimated by multiplying .0005 times the value of Government facilities, equipment, and material; liability losses can be estimated by multiplying .0007 times personnel costs. For a simplified estimate of insurance costs, multiply [the sum of lines 1 through 4 and the net book value (acquisition cost less depreciation accumulated to the beginning of the cost analysis period) of all depreciable assets used by the work center by .0006.

i. Overtime and Other Premium Pay - The amounts of overtime and other premium pay to be included as indirect costs in the operations overhead pool are those incurred in order to complete all work of the work center in a timely manner. The reason for considering the overtime or other premium portion of the salaries and wages as an indirect cost is that the scheduling of work effort is usually done on a random basis. That is, the actual work performed during overtime hours or on holidays is usually no more the basis for incurring the premium payments than the effort performed during the regularly scheduled hours. Accordingly, under these circumstances, all work performed in the work center should receive a proration of the premium costs. This is accomplished by including these costs in the overhead expense pool.

(1) The straight time portion of such wages will be considered as Direct Labor, as in section III.C.1. of this Handbook. If the premium pay is necessitated not by an overloading of the work center's normal capacity, but by the special demands of a single customer or client, the related premium costs should be considered as Other Direct Costs of the product or service furnished that customer or client.

(2) Supporting documentation for the amount of overtime and other premium pay included in the indirect cost pool should indicate how the need for such payments was determined and how the amount was computed.

j. Other Costs - There may be other indirect costs incurred by or for the work center being reviewed which do not fall into any of the categories discussed in this paragraph 4, but which must still be included in the overall

cost estimate. If further guidance is required on some unique element of cost, the cognizant accounting office should be consulted.

5. Developing Overhead Rates

a. Allocation Base - Determination of the amount of the annual operations overhead cost to be applied to the product/service being estimated requires establishment of an appropriate base for allocation of costs. Where the product/service being estimated represents the total effort of the organization for the year, all of the operations overhead costs are applicable. However, where work is done on more than one product or service during the year, an allocation must be made among these products and/or services. This is normally done by determining and applying an overhead rate. Overhead rates can be expressed as a percentage of one or more elements of expense (e.g., 20% of direct labor or 15% of total direct costs). An overhead rate can also be expressed as a monetary unit related to some quantitative measure (e.g., $2.00 per direct labor hour, $3.00 per machine hour, $0.50 per square foot of space used).

To illustrate, assume that Work Center "A" provides three products/services entitled A-1, A-2, and A-3, and a cost comparison analysis is being prepared for A-3. The following additional facts are to be assumed:

- That 300,000 direct labor hours are incurred annually on the three products/services, as follows:

A-1		150,000	
A-2		90,000	
A-3		60,000	
	Total	300,000	direct labor hours

- Direct labor costs for the year are $3,000,000.

- 50,000 machine hours are used to provide the three products/services.

A-1		5,000	
A-2		5,000	
A-3		40,000	
	Total	50,000	machine hours

b. Overhead Rates - Using these assumptions as well as those shown for Work Center "A" in paragraph D.3.a., the following overhead rates (and many others) can be developed:

Percentage of Direct Labor Costs

Operations Overhead ÷ Direct Labor	$\frac{\$4,500,000}{\$3,000,000}$	= 150%

Percentage of Direct Costs

Operations Overhead ÷ Total Direct Costs	$\frac{\$4,500,000}{\$9,000,000}$	= 50%

Rate Per Direct Labor Hour

Operations Overhead ÷ Direct Labor Hours	$\frac{\$4,500,000}{300,000}$	= $15.00 per Direct Labor Hour

Rate Per Machine Hour

Operations Overhead ÷ Machine Hours	$\frac{\$4,500,000}{50,000}$	= $90.00 per Machine Hour

(1) As can be seen from the above, there are several ways of developing overhead rates. Rarely will the various rates result in the identical allocation of overhead costs to the products/services provided by the work center. Accordingly, the selection of the proper base of allocation is of extreme importance in costing product/service A-3.

(2) A straightforward way to select the best allocation base is to chart operations overhead costs and various possible allocation bases over time. The allocation base that varies most frequently in the same direction at the same time as the operations overhead costs would be the best allocation base.

(3) As long as it can be ascertained that indirect costs vary directly and proportionately with a measure of an element of expense or activity (dollars, hours, etc.) and that all products or services furnished by the work center benefit from the same elements of expense or activity, and in the same proportion, the use of that single element as the allocation base will normally result in an equitable distribution of overhead costs. Assuming direct labor hours meet these criteria

for Work Center "A," operations overhead would be allocated to the three products/services as follows:

Product/ Service	Direct Labor Hours (1)	Operations Overhead Rate Per Direct Labor Hour (2)	Overhead Allocation (1) x (2)
A-1	150,000	$15.00	$2,250,000
A-2	90,000	15.00	1,350,000
A-3	60,000	15.00	900,000
	300,000	$15.00	$4,500,000

(4) A single base of allocation will not normally be adequate in a work center where:

(a) The indirect costs do not vary directly and proportionately with a single measure of expense or activity, or

(b) all elements of expense and activities which influence the incurrence of operations overhead costs (e.g., direct labor influences supervision, etc.) are not incurred in roughly the same proportion for the various products/services provided.

When these conditions are encountered, there are two possible solutions. The first would be to subdivide the work centers into departments and develop a separate operations overhead pool and rate for each. In that case, development of the departmental operations overhead would be identical to the development of the operations overhead rate(s) for Work Center "A", as described herein. The second solution is to develop two or more overhead rates within the work center by grouping the indirect expenses in overhead pools related to the disparate functions and allocating them on appropriate bases. Obviously, the bases of allocation will not be the same.

(5) We can illustrate the use of two rates for Work Center "A" using the assumptions previously cited. From these assumptions, it can be seen that product/service A-3 is responsible for most of the machine hours used by the work center. Specifically:

A-1 uses 5,000 machine hours;

A-2 uses 5,000 machine hours;

A-3 uses 40,000 machine hours.

Accordingly, direct labor hours would not be an appropriate allocation base because it would result in a disproportionate amount of machine shop expenses (depreciation, maintenance and repair) being allocated to products A-1 and A-2. Conversely, the use of machine hours would result in an inequitable share of the labor-related indirect expenses being allocated to product/service A-3.

(6) Two pools for Work Center "A" may be established by segregating machine-related costs from other operations overhead costs as follows:

Basic Pool	$1,500,000
Machine Pool	3,000,000
Total Operations Overhead	$4,500,000

(7) It is determined that the best allocation base for the basic pool is direct costs and the rate is:

$$\frac{\text{Basic Pool}}{\text{Direct Costs}} \div \frac{\$1{,}500{,}000}{\$9{,}000{,}000} = 16.67\%$$

(8) The $9,000,000 direct costs are determined to be charged to each product as follows:

A-1	$4,500,000
A-2	2,700,000
A-3	1,800,000
Total	$9,000,000

(9) Therefore, the allocation of the $1,500,000 in the basic pool is:

A-1	16.67% of $4,500,000 =	$	750,000
A-2	16.67% of $2,700,000 =		450,000
A-3	16.67% of $1,800,000 =		300,000
			$1,500,000

(10) It is also determined that the best allocation base for the machine pool is machine hours and the rate, $60.00 per machine hour:

$$\frac{\text{Machine Pool}}{\text{Machine Hours}} \div \frac{\$3,000,000}{50,000} = \$60 \text{ per machine hour}$$

Taking the machine hour usage previously determined and this rate, the allocation is:

A-1	5,000 hours at $60.00 =	$	300,000
A-2	5,000 hours at $60.00 =		300,000
A-3	40,000 hours at $60.00 =		2,400,000
			$3,000,000

(11) Combining the two pools gives us the total allocations:

	Basic Pool	Machine Pool	Together
A-1	$ 750,000	$ 300,000	$1,050,000
A-2	450,000	300,000	750,000
A-3	300,000	2,400,000	2,700,000
Total	$1,500,000	$3,000,000	$4,500,000

(12) The following comparison highlights the significant differences that can result from using different overhead allocation methods.

	One Rate (Direct Labor Hours)	Two Rates (Basic and Machine)	Difference (Subtract One from Two)
A-1	$2,250,000	$1,050,000	$(1,200,000)
A-2	1,350,000	750,000	(600,000)
A-3	900,000	2,700,000	1,800,000
Total	$4,500,000	$4,500,000	$ -0-

6. Summary. In summary, operations overhead is a significant cost element in estimating the cost of providing a product or service. It is extremely important that elements of indirect expense included in the operations overhead pool are appropriate and the amounts thereof are carefully estimated. It must be determined by careful study whether more than one pool of expenses is required. Also, the selection of a proper base(s) for allocation is essential to accurate estimating. As illustrated above, significant differences can result from the use of different methods for allocating overhead. The choice of the appropriate method should be based on a review of the functions and their related costs within the work center. The pools and bases should be selected based on supported facts and circumstances. They should not be selected on the basis of arbitrary assumptions, or the fact that the data for a particular base are readily available. The main purpose of the overhead rate must always be kept in mind. It is developed to permit the allocation of overhead expenses to the products/services being provided on the basis of the benefits they receive from the incurrence of the cost.

7. Supporting Documentation. The supporting documentation needed for the amount of operations overhead allocated to product/service A-3 will be a listing of the expenses included, the base used to develop the rate(s), and the supporting detail for each. Figure 5 is an illustration of the operations overhead costs of Work Center "A."

FIGURE 5
WORK CENTER "A"
COMPUTATION OF OPERATIONS OVERHEAD RATE
FOR THE YEAR ENDING ________

Operations Overhead Expenses		Basic	Machine	Total
Indirect Labor				
Supervision		$ 70,000	$ 30,000	$ 100,000
Clerical		700,000	300,000	1,000,000
Indirect Time of Direct Personnel		400,000	600,000	1,000,000
Indirect Materials and Supplies		30,000	370,000	400,000
Depreciation		40,000	400,000	440,000
Rent		10,000	50,000	60,000
Maintenance and Repair		40,000	385,000	425,000
Support Costs		50,000	115,000	165,000
Utilities		60,000	610,000	670,000
Insurance		10,000	20,000	30,000
Overtime and Other Premium Pay		60,000	100,000	160,000
Other		30,000	20,000	50,000
TOTAL OPERATIONS OVERHEAD	(A)	$1,500,000	$3,000,000	$4,500,000
Allocation Bases	(B)			
Direct Costs		$9,000,000		
Machine Hours			50,000	
Overhead Rate	(A)÷(B)=(C)	16.67% of Direct Costs	$60.00 Per Mach. Hour	
Application to Product/ Service A-3				
Direct Costs Applicable To A-3	(D)	$1,800,000		
Machine Hours Applicable To A-3	(D)		40,000	
Amount of Operations Overhead Allocated to A-3	(C)x(D)	$ 300,000	$2,400,000	$2,700,000

E. INTERAGENCY SUPPORT

1. In developing the estimates of Government costs, products or services which are excess to the needs of other Federal agencies should be used in preference to new procurements when reported as excess under a formal program or when more economical than procurement from a private commercial source. When a comparative cost analysis is to be made, the agency that would be providing the excess product or service must prepare cost estimates in accordance with this Handbook and furnish its cost data on lines 1 through 9 and its other considerations on lines 23 through 30 of the Cost Comparison Form. The Form must be signed on the "prepared by" and "audit certification" lines. The Cost Comparison Form will be submitted to the agency receiving the product or service. The receiving agency will classify the providing agency's costs as other direct costs, operations overhead, or general and administrative expense, as appropriate. The other considerations will also be added to the appropriate classification. The providing agency's Cost Comparison Form will be used as supporting documentation. NOTE: Agency reimbursement charges for providing the product or service to another agency may not be used as a basis for the cost estimate unless such charges reflect all costs as provided in this Handbook.

2. If a decision to contract out would cause the Government not to utilize available excess facilities, material or service capacity, the impact in terms of costs to the Government must be considered in computing the total cost of contracting for the product or service. For guidance in developing and documenting such costs, see the section V.F.

F. OTHER DIRECT COSTS -- Line 6

1. Other direct costs are the sum of all those direct costs exclusive of direct material and direct labor, which are identified as having been incurred specifically for a particular product or service (the final cost objective). Some examples of other direct costs are: service center charges (e.g., ADP service center, printing shop, etc.), travel, and purchased services.

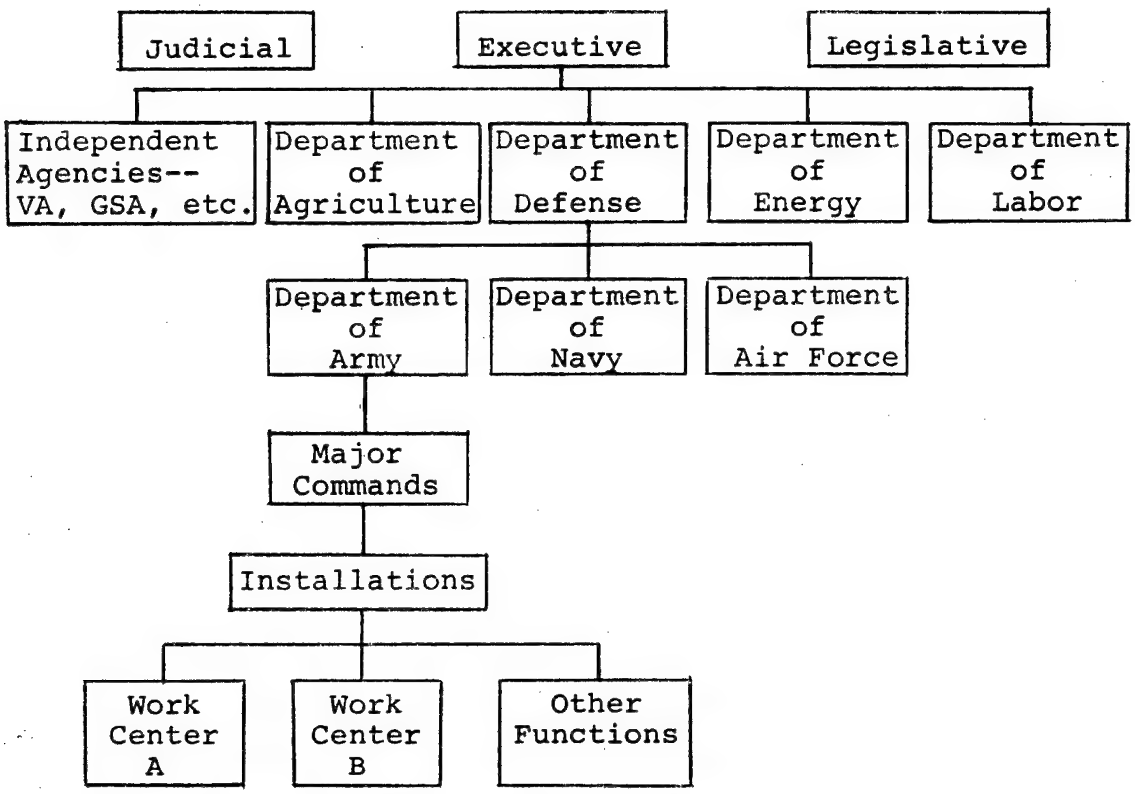
2. There are certain types of effort that some organizations treat as indirect expense and others classify as direct. Examples of these costs are special travel expenses, preservation, packaging and packing, plant rearrangement, consultant's fees, certain clerical salaries,

shop supplies, transportation costs, plant protection, royalties, computer expenses, and telephone and telegraph expenses. Whenever an organization decides to classify any of these costs as direct, they normally will be included under Other Direct Costs unless they are direct material or direct labor. When an organization decides to reclassify a cost from an indirect to a direct charge, it is necessary to ascertain that the organization's accounting and estimating practices provide consistent treatment of these special costs during the period under review. To prevent duplication, it must be established that when these items of expense are treated as direct costs, similar costs are excluded from indirect costs applied to the estimate. Conversely, when an organization reclassifies a cost from direct to indirect, care must be taken to include these costs in the appropriate indirect cost pool.

3. Refer to sections III.B.2. and III.C.1. for cost estimating instructions and supporting documentation requirements which are appropriate for estimating and documenting other direct costs.

G. <u>GENERAL AND ADMINISTRATIVE EXPENSE</u> -- <u>Line 7</u>

1. General and administrative (G&A) expense consists of those financial, management or other expenses which are incurred for the benefit of an organizational unit as a whole. They do not include expenses which should be classified as material or operations overhead expenses which have been discussed previously in this Handbook. Because of their nature, general and administrative expenses may be incurred at various levels within the Governmental structure. The following simplified diagram depicts the various levels within the Government where G&A expenses may be incurred:



2. Certain administrative expenses incurred by the executive, legislative and judicial branches of the Government are applicable to the various departments and independent agencies. Similarly, certain administrative expenses incurred at the department level would be applicable to the activities within the departments organization (e.g., Departments of Army, Navy, and Air Force). This flow would continue on down to the organization level. Within the organization itself, general and administative expenses may be incurred which are applicable to all the functions being performed there. This flow-down of G&A expenses will vary based on the organizational structure of each department or agency, but will exist in some form in each. A portion of the general and administrative expenses incurred above the installation level are applicable to the product or service being estimated. However, for purposes of this Handbook, only those G&A expenses which contribute directly to the actual operation of the organization will be included in the estimate. This decision is based on materiality of amount and the conclusion that the efforts involved in funding, policy-making, long-range planning, direction, etc. (commonly referred to as staff functions) would continue and

be equally applicable to either contractor or Government effort.

3. In deciding at what level to discontinue the allocation of G&A expenses to the product or service to be provided, a self-sufficiency criterion should be used. A self-sufficient organization is one that operates as an independent unit, receiving only funds, policy direction, and guidance from the next higher organizational unit. If any general and administrative-type activities are provided at no cost or on an incremental cost basis, the organization is not self-sufficient. In these circumstances, an appropriate allocation of the applicable expenses of the incurring organization should be included in the recipient's G&A expenses, to be allocated to the products and/or services the recipient provides.

4. To illustrate, assume the organization we are concerned with is a laundry. If that laundry is located on its own land, does its own maintenance, budgeting, accounting, etc., then it can be considered self-sufficient and no further G&A costs will be allocated to it from the next higher organizational unit. The G&A costs incurred by the laundry itself will be allocated to the various products or services it provides. However, if that laundry was collocated on the same grounds or in the same building of another organization, say a hospital, and the hospital staff provides it with certain maintenance, budgeting and accounting effort, on a no-cost or incremental cost basis, then the laundry would not be self-sufficient. The applicable portion of the hospital's G&A expense must be allocated to the laundry. Assume further that the hospital to which the laundry is attached is located on a military base and the hospital receives certain support from the base, such as road and parking lot maintenance, security, fire protection, etc. If the hospital receives these services on a no-cost or incremental cost basis, it is not a self-sufficient unit. The allocable portion of the costs incurred by the base that benefits the hospital should be included in the hospital's G&A expenses and an equitable amount thereof allocated to the laundry. For purposes of this illustration, we will assume that the military base is self-sufficient (they all are not); that is, it receives only funding, policy direction, and guidance from its next higher level of command. Accordingly, none of the G&A expenses incurred by the next higher level of command would be allocated to the military base.

5. In addition to the self-sufficiency criterion, materiality of amount must be kept in mind in determining the level above which G&A expenses will not be considered in the estimate. When the costs involved are minor in amount and their ultimate allocation to the product or service is not likely to have a bearing on the decision to contract-out or perform in-house, they may be excluded if not readily available.

6. The G&A rate to be used to allocate the organization's G&A expenses to its activities will be developed in much the same manner as the operations overhead rate was developed. That is, a pool of annual G&A expenses will be developed and the total will be divided by the allocation base.

7. A significant difference between the development of a general and administrative expense rate and an operations overhead rate is that G&A expenses must be accumulated in a single pool. This differs from operations overhead where certain circumstances may require the establishment of more than one pool. The reason that only one pool of G&A expenses is needed is the nature of G&A expenses. As previously stated, G&A expenses are incurred for the benefit of the organization as a whole. If an incurred expense does not meet this criterion, it should not be included in the G&A pool.

8. Typical examples of the types of cost to be included in the G&A expense pool are the expenses connected with the following offices or functions:

The Office of the Organization Director (Commander)
The Office of the Comptroller
The Office of the General Counsel (Judge Advocate)
Centralized Personnel Services
Centralized Administrative Services (Adjutant General)
Public Relations
Internal Review (Audit)
Security, including security clearances.

9. To develop a G&A expense pool, the costs associated with any function performed for the benefit of all products/services provided must be estimated. The cost of performing each function is the total of the expenses (indirect labor, indirect material, etc.) incurred for that purpose during the year. The nomenclature for the types of expenses to be included in the G&A overhead pool is similar to that used in the context of operations and material

overhead. The characteristic which distinguishes these three types of overhead costs, one from the other, is the purpose for which each is incurred. Accordingly, the G&A pool will be made up of elements of expense similar to those for operations overhead in nomenclature but which are related to performing functions and services such as those performed by the offices listed above. The methods of estimating the amounts of these costs will be the same as those described in the Operations Overhead section and are not repeated here.

10. Since all G&A expenses must be incurred for the benefit of the organization as a whole, the base used to allocate these costs to the final cost objective must be representative of the overall operation of the organization. For this reason, the total costs incurred (exclusive of G&A expenses) has been chosen as the allocation base. This base should include the cost of all the mission functions of the organization whether these are commercial, industrial or governmental functions.

11. The following steps depict the development of a G&A rate:

a. Step 1: Develop the G&A expense pool. The amount to be included in the pool is the amount of the G&A expense expected to be incurred during the first year of performance. This amount will be predicated on past experience, adjusted to provide for inflation and any change in operations.

General and Administrative Expenses

Executive, Professional, Technical, and Supervision Salaries (including fringe benefits)	$1,450,000
Clerical and Other Salaries (including fringe benefits)	1,175,000
Other Expenses (Training, Depreciation, Indirect Materials, Allocated Support Costs, etc., except those included in material or operations overhead)	3,100,000
Total G&A Expenses	$5,725,000

b. Step 2: Develop the Base of Allocation (costs incurred by

Organization A, exclusive of G&A expense)

Direct Costs	$42,500,000
Operations Overhead Costs	8,900,000
Material Overhead Costs	100,000
Total Cost Incurred Exclusive of G&A Expenses	$51,500,000

c. Step 3: Develop the Organizational G&A rate (divide the pool by the base)

$$\frac{\$\,5{,}725{,}000}{\$51{,}500{,}000} = 11.12\%$$

12. To estimate the amount of the annual G&A expenses applicable to the product or service being estimated, the above developed rate will be applied to the total estimated annual cost (exclusive of G&A) of providing the product or service as illustrated below:

Direct Material	$ 450,000
Material Overhead	5,000
Direct Labor	1,000,000
Fringe Benefits	250,000
Other Direct Costs	50,000
Operations Overhead	1,500,000
Subtotal	3,255,000
General & Administrative Expense ($3,255,000 x 11.12%)	361,956
TOTAL COST	$3,616,956

13. The detail required to support the amount of G&A expense allocated to the product or service being estimated will be a listing of the expenses related to the functions and offices classified as general and administrative expenses.

H. INFLATION OF OUT-YEAR COSTS -- Line 8

1. In preparing the Government's estimate, all known or anticipated increases in costs to be incurred in the first

year of operation should be provided for in each element of cost, as stipulated by the instructions contained in this Handbook, including any expected salary increases for government employees. For all subsequent years, anticipated changes in scope of work may be added but no inflation factors will be added to the individual elements of cost.

2. To calculate the amount to enter in Line 8 for inflation, follow these instructions.

For year	Multiply the sum of lines 1 through 7 in column	By the factor
2	"Second year"	.04
3	"Third year"	.082
4	for "Fourth Year"	.125
5	for "Fifth Year"	.17

3. The entry in line 9 in each column will be the sum of lines 1 through 8 in that column.

CHAPTER IV - DEVELOPING AN ESTIMATE OF CONTRACTING-OUT COSTS

A. GENERAL This section of the Handbook deals with the determination of the cost to the Government of acquiring the product or service being analyzed by letting a contract. It includes determination of not only the amount to be paid to the contractor (contract price) but also the related in-house costs that will be incurred by the Government as a result of contracting out. The Cost Comparison Form (Exhibit 1) identifies the following categories of Government cost which might be incurred in connection with contracting out:

Contract Price
Transportation
Contract Administration
Government-Furnished Property
Standby Maintenance
Other Costs
General and Administrative Expense (on the above)

Comments on each of these categories are contained in the following paragraphs.

B. CONTRACT PRICE -- Line 10

1. The contract price included in the cost comparison must be supported by a firm bid or proposal. The contractor's bid or proposal must be predicated on the same statement of work utilized in preparing the Government's estimate. Also, the solicitation for bids or proposals will notify the bidders or offerors that a comparison will be made between the cost of contracting the effort and performing it in-house.

2. In determining the amount to be recorded as the contract price, consideration must be given to the contract type. The following guidance is provided in this regard.

a. In the case of an advertised firm fixed price contract, the price of the low bidder or offeror will be entered without adjustment. If a firm fixed price contract is to be negotiated, the low negotiated price will be entered.

b. When fixed price contracts with flexible pricing arrangements are contemplated (e.g., fixed price

incentive fee), the target price of the apparent low bidder or offeror will be entered.

c. If a contract with an award fee is proposed, the performance level comparable to that attributed to Government employees in preparing the Government's estimate will be used to estimate the amount of the fee. The estimated award fee, plus the contract costs of the apparent low bidder or offeror will be entered.

d. If a time and material or labor-hour contract is proposed, the estimated total cost of performance may be calculated and entered. Alternatively, comparable rates can be developed for the Government cost estimate and the comparison can be made on the basis of rates, rather than total costs.

e. If a cost reimbursement-type contract is required by special circumstances, the apparent low bidder or offeror's estimated costs must be subjected to a meticulous technical and cost evaluation to assure that the estimated costs are neither over nor understated. Adjustments to the bidder's or offeror's estimate need to be reviewed with the bidder or offeror before the adjusted contract price is entered.

C. <u>TRANSPORTATION COST -- Line 11</u>

1. The Government may incur transportation costs whether a product/service is provided by an in-house operation or by a contractor's operation. Transportation for an in-house operation is normally associated with the applicable overhead. This section deals with the cost to the Government of transportation provided in connection with a product/service obtained by contract.

2. The contract documents or negotiation memoranda will indicate the additional transportation that is to be furnished or reimbursed by the Government. These items are usually clearly indicated. There may be some transportation in addition to that spelled out in the contract which require an estimate. The best source for obtaining estimates of the cost of this transportation is the local transportation or purchasing office.

3. Typical of the transportation costs that may be incurred by the Government are:

a. Cost of transporting a contractor's employees;

b. Cost of transporting Government material, equipment, or supplies to and from a contractor's site, such as:

(1) Cartage cost from airport, bus, rail or marine terminals;

(2) The cost of special equipment, like refrigerated vans or heated containers;

(3) The cost of demurrage on rail cars or detention charges for trucks;

(4) In exceptional cases, the cost of special insurance.

4. The supporting documentation for these costs should describe the transportation to be provided, the mileage and/or rates utilized in arriving at the estimates, and the source(s) from which they were obtained. If transportation costs were derived in some way other than by extending applicable mileage and rates, the methodology used to arrive at the estimate should be fully explained.

D. CONTRACT ADMINISTRATION -- Line 12

1. Contract administration includes the costs incurred by the Government in assuring that the contract is faithfully executed by both the Government and the contractor. In addition to reviewing contractor performance and compliance with the terms of the contract, contract administration consists of processing payments, negotiating change orders, and monitoring close-out of contract operations. Centralized agency-wide contracting costs are also included.

2. The costs of contract administration will be determined by applying four percent (4%) to the contract price, line 10. The result will be entered on line 12 as the cost of contract administration.

E. GOVERNMENT-FURNISHED PROPERTY -- Line 13

1. When Government property is furnished to a contractor in connection with the performance of a contract, associated costs must be considered in determining the overall cost of the contract. Government-furnished property includes:

a. Property that is in the possession of, or acquired directly by, the Government and is subsequently delivered or otherwise made available to the contractor.

b. Property, acquired by a contractor in accordance with the terms of the contract, that does not become a part of the end item and is not consumed during contract performance, and title thereto vests in the Government. Examples of Government-furnished property are land, buildings, facilities, equipment, special tooling, materials, and supplies.

2. The methods for determining the costs related to furnishing Government property will vary with the use made of the property. Where Government property becomes a part of the end product (material) or is consumed in providing a product or service (supplies) the full cost to the Government of acquiring and furnishing these materials and supplies must be added to the cost of contracting. When property such as land, buildings, facilities, equipment, and special tooling are provided for the contractor's use during the performance of the contract but will be returned to the Government upon contract completion, the costs of ownership of these assets by the Government during the period of contract performance, plus any other costs incurred in connection with furnishing the property to the contractor must be added to the cost of contracting. More specific guidance is contained in the following paragraphs. The sum of the costs for Government-furnished materials and supplies and for Government-furnished facilities, in accordance with these paragraphs, will be entered on line 13 of the Cost Comparison Form.

3. <u>Government-Furnished Material and Supplies</u>

a. Government-furnished material and supplies (GFM&S) is property which may be incorporated into or attached to a product/service to be delivered under a contract and those supplies which may be consumed or expended in the performance of a contract. It includes, but is not limited to, such items as raw materials, parts, subassemblies, components, and manufacturing supplies.

b. The instructions for estimating the costs of GFM&S are identical to those for estimating the cost of in-house material and supplies (see sections III.B.2. and III.B.3. for guidance in estimating the cost of GFM&S). For instructions on the treatment of costs associated with

transporting GFM&S to and from the contractor's site, see section IV.C.

c. The supporting documentation for GFM&S shall include a detailed listing of all the items to be furnished with quantities, unit prices, suppliers, details of adjustments and the source(s) of the information. See Figure 1 in section III.B. for an illustration of the supporting documentation required.

4. Government-Furnished Facilities (Buildings and Other Land Improvements) and Equipment

a. The costs applicable to facilities and equipment furnished to contractors by the Government must be added to the cost of contracting out for purposes of Circular A-76 comparisons. These costs consist of depreciation of capitalized equipment or facilities, or the full expense of minor items of equipment which do not meet agency capitalization criteria. Depreciation on Government-furnished facilities and equipment shall be computed in accordance with the instructions on computing depreciation contained in section III.D.4.c. Only the depreciation costs applicable to the proposed contract period will be considered for purposes of the cost comparison.

b. When the Government rehabilitates, modifies, or expands existing Government-owned facilities or equipment for the purpose of providing it to a contractor as Government-furnished property, the related costs will be treated as follows:

(1) If the rehabilitation, modification or expansion of the Government facilities or equipment increases the useful life of the assets to the Government or the asset value of the property, the related costs shall be depreciated over the remaining useful life of the assets. The amount to be included in the Circular A-76 cost comparison as an add-on to the contract cost shall be limited to the cost amortization applicable to the period covered by the proposed contract.

(2) If the rehabilitation or modification work consists primarily of plant rearrangement, minor repairs, or other work which does not extend the useful life of the assets or does not increase the value of the property to the Government, the related costs shall be considered as additional costs of contracting out. The entire cost of such rehabilitation or modification will be charged to the

first year of contract operations or spread over the contract period depending on the period the costs are determined to benefit.

(3) While the acquisition cost of land is not depreciable, the costs of any improvements or alterations made to land utilized in performance of the contract, such as landscaping, special grading, etc., should be accumulated and depreciated over the estimated useful life of the improvements or alteration. The add-on to the contract cost will be limited to the depreciation applicable to the period covered by the proposed contract.

c. Cost estimates will be supported by a summary listing of all the above types of cost and the location of the detailed records used to determine them as follows:

Government-Furnished Facilities and Equipment

		Amount	Location of Records
Depreciation			
Land Improvements	$ XXX		
Buildings	X,XXX		
Equipment	XX,XXX		
		$XX,XXX	
Other Expenses			
Plant Rearrangement	X,XXX		
Minor Repairs	XXX		
Other	XXX		
		X,XXX	
Total		$XX,XXX	

d. Supporting data should include details on original cost, residual value, annual depreciation, etc., of the equipment and facilities.

F. STANDBY COSTS -- Line 14

1. In unusual and infrequent instances, it may be necessary to hold Government equipment and/or facilities in a standby status when an in-house activity is terminated in favor of contract performance to assure provision of the needed product or service. Costs related to holding equipment and facilities for any other purpose are not

standby costs for purposes of this Handbook, and should not be added to the contract price. Standby costs are defined as expenses necessary for the upkeep of property in standby status which neither add to the permanent value of the property nor appreciably prolong its intended life, but keep it in an efficient, operating condition or available for possible use in providing the needed product or service.

2. Standby cost is not to be confused with Utilization of Government Capacity or Disposal of Fixed Assets. Each of these factors is discussed separately in Chapter V of this Handbook. In most cases Government property will be disposed of or put to other use when a decision is made to obtain a product or service from the private sector instead of continuing to produce it in-house. A detailed justification is required for holding the Government property in standby status, and a copy of the justification should be included in documentation supporting the cost analysis.

3. If it is determined that it is necessary to hold Government property in a standby status, all related costs must be estimated for inclusion in the cost comparison analysis. The estimate of standby costs begins with a determination of the facilities and/or equipment that will be placed in a standby status to support a contractor. The next step is to estimate the cost, if any, of preparing the facilities and equipment for standby status. The cost of holding the facilities or equipment in a standby status must also be estimated in order to determine the total standby maintenance cost which would result from contract versus in-house production. These costs may be estimated by utilizing engineering estimates, prior experience, or experience of other organizations. If similar standby costs have been incurred previously, these may be used as a basis for subsequent costing provided appropriate adjustments have been made for facilities, equipment, and pricing variations. When computing the depreciation cost of property in standby status, it will be necessary to review the useful life of the property since useful life may be increased by the change from production to standby status. This review will be necessary even if the depreciation is based on machine hours usage because, while wear and tear may cease, obsolescence may continue.

4. When the estimated standby cost is determined, the total of this cost will be entered on line 14 of the Cost Comparison Form. Backup data must be included for all the cost elements associated with preparation for and

maintenance in standby status. See Chapter III for cost estimating instructions, types of cost elements to be included, and documentation requirements.

G. OTHER COSTS -- Line 15

1. This cost category encompasses any additional Government costs which would result from contracting and which are not covered elsewhere in the cost comparison. This cost category is included to provide for unusual circumstances which may be encountered in particular cost analyses. The total amount of such other costs should be entered on line 15 of the Cost Comparison Form.

2. Supporting data will include a complete description of the costs involved and the rationale for including each, together with cost detail as outlined for the various cost elements in Chapters III and IV.

H. GENERAL AND ADMINISTRATIVE EXPENSE -- Line 16

The general and administrative (G&A) expense applicable to the in-house effort related to contracting for a product or service must be included as part of the cost of contracting out. The amount of such expenses to be included will be determined by applying the G&A rate developed in Chapter III to the total costs of the in-house effort (the sum of lines 11 through 14).

I. INFLATION OF CONTRACTING-OUT COSTS

1. The four percent inflation factor is applicable to the costs associated with contracting-out (lines 11, 13, 14, and 15) on a line by line basis. However, any nonrecurring costs included in the first year's total should be identified and removed from the base figure for purposes of applying the appropriate factor. For example, assume that the estimate of transportation costs for the first year of performance is $5000, and that $3000 of that total represents the cost of transportation necessary to enable the contractor to begin performance. While the full $5000 would be entered in Line 11 under the "First Year" column, only $2000 ($5000 - $3000) would be incurred in subsequent years and be subject to inflation. This amount subject to inflation will be multiplied by 1.04 for the "Second Year" column, 1.082 for the "Third Year" column, 1.125 for a fourth year, and 1.17 for a fifth year.

2. The inflation factor must not be applied routinely to these first year costs, however. If the Statement of Work does not require consistent Government support throughout the period of performance, then first-year costs should not be inflated. Instead, the requirements for support in each time period would have to be separately evaluated, and the appropriate inflation factor applied to the estimated cost. Therefore, entries in out-year columns may bear no direct connection to the "First Year" entry on the same line. Since General and Administrative expense is derived by applying a G&A rate to already-inflated figures, the inflation factor shall not be separately applied to line 16.

3. It is particularly important to identify the nonrecurring portion of Government-furnished property (line 13) and standby costs (line 14). Of the Government-furnished property costs, only minor repair and "other" costs are subject to inflation. The standby cost total must be reduced by the amount attributable to preparing facilities or equipment for standby status before the inflation factor is applied.

CHAPTER V - OTHER CONSIDERATIONS

A. GENERAL. Up to this point, the Handbook has been concerned with determining the cost to the Government of acquiring a product or service either by contracting-out or by in-house performance. The decision as to which alternative to follow will not usually be made solely on the basis of the costs of providing the product or service as developed in accordance with Chapters III and IV. Additional costs or revenue losses will normally be considered to determine the most economical of the two methods.

B. SHORTENED COST COMPARISON WHEN IN-HOUSE COSTS ARE BELOW BEST OFFER FOR A CONVERSION

1. After the contracting officer opens the bids or completes negotiations, he will indicate in line 10 of the form the lowest responsible bid or proposal. When the basic contract price (line 10) exceeds the total in-house costs (line 33) it can be assumed that the cost of in-house performance will be less than the cost of contracting-out. This assumption precludes the necessity for completing the portions of the form dealing with the cost of contracting-out. Completion of these portions would only serve to document the net additional costs which must be added to the contract price. Since the contract price already exceeds the cost of in-house performance, such information would not alter the ultimate conclusion of the comparison. However, an exception should be made when it is likely that offsets resulting from contracting-out (e.g., Federal Income Tax lost, disposal of Government facilities, etc.) would reduce the contract cost below Government cost.

2. When the shortened comparison is considered proper and advisable, the contract price entered in line 10 will also be entered on line 34. The amount by which the cost of in-house performance (shown on line 33) is under the contract price (shown on line 34) will be determined and entered on line 35. The Form will then be signed on the line entitled "Cost Comparison Completed By," by the Task Force Chairman or such other individual who was assigned the responsibility. The Form, together with backup documentation, will then be subject to audit and other final procedures described in Chapter II.

C. DETAILED COST COMPARISON.

When total in-house costs (line 33) exceed the basic contract price (line 10), the full impact of the two alternatives on the overall cost of Government operations must be determined. This will require the decision-maker to evaluate the following types of costs, as described in the remainder of this chapter:

1. Loss of opportunity to employ resources in other areas if performed in-house (cost of capital);

2. The one-time costs that will be incurred to start or terminate a Government operation;

3. The impact on remaining operations of contracting-out a portion of a work center's effort (utilization of Government capacity);

4. Loss of revenue (Federal taxes) due to in-house performance.

D. COST OF CAPITAL

1. The cost of capital is defined as an imputed charge on the Government's investment in all of the plant facilities and other assets necessary for the work center to manufacture products or to provide services.

2. Basically, the imputed charge for the cost of capital is an opportunity cost: if the capital had not been devoted to this performance during the current period, it could have been devoted to another use which would have provided other income or avoided interest expenses. The imputed charge is not an attempt to recover interest on borrowed money. For purposes of the comparisons required by this Handbook, a distinction is made between those assets which will be retained and those that will be disposed of if the product or service is contracted out. However, all of the required assets will be considered.

a. The cost of capital for assets that will be used both for in-house performance and contractor performance will be determined in accordance with paragraphs D.3. and D.4. below. The appropriate amount will be entered on both lines 18 and 23 for each year in the period of performance.

b. The cost of capital related to assets that will be used in the event of in-house performance but disposed of in the event of contractor performance will be accorded the following treatment. The cost of capital computed as in D.3. and D.4. below, will be entered on line 18. In addition, the estimated gain or loss on the disposal of the assets will be determined by deducting the net book value of the assets and the related disposal costs from the estimated proceeds of the sale (see "Disposal of Fixed Assets"). A 10% cost of capital factor will be applied to this gain or loss and entered on line 28 for each year in the period of performance. If the disposal results in a gain, the amount entered on line 28 will reflect a reduction to the cost of contracting-out. If the disposal results in a loss, the amount entered on line 28 will be an additional cost of contracting-out.

c. The cost of capital for assets that will be used only for in-house performance but which must be retained by the Government to assure performance in the event of significant contract interruption or delay will also be entered on both lines 18 and 23 for each year in the period of performance.

d. The cost of capital for assets that will be used only for in-house performance, but will be retained by the Government if the function is contracted out to meet possible future contingencies, will be entered on line 18 for each year in the period of performance.

e. The cost of capital for assets that will not be used by the Government for in-house performance but will be required to assure contractor performance will be entered only on line 23 for each year in the period of performance.

f. No entry will be made for those assets that will not be used in in-house performance but are required to meet possible future contingencies.

3. <u>Determination of the Cost of Capital for Fixed Assets</u>.

a. In order to estimate the cost of capital, it is necessary to determine the net book value (total acquisition cost less depreciation accumulated prior to the cost comparison period) of each tangible capital asset (land, improvements, buildings, equipment, etc.) which is related to performance. The acquisition cost of land and the net book value of each depreciable tangible asset should be

available from accounting records. However, if accounting records do not provide the necessary information, it will be necessary to utilize engineering estimates, prior experience, or experience of other organizations.

b. The cost of capital will be computed by applying an opportunity cost rate of 10% to the total net book value of the assets. If the assets involved are used solely to provide the product or service being estimated, the total amount of the cost of capital will be entered in the appropriate line(s) on the Cost Comparison Form. If the assets involved are used not only to provide the product or service being estimated, but other products or services as well, a proration of the cost of capital will be made.

4. Prorating Cost of Capital.

a. If the cost of capital were a real rather than an imputed cost, it would be properly classified as a General and Administrative (G&A) expense. Accordingly, its proration to the product or service being estimated will be in the same proportion that the total estimated costs to be incurred (less G&A expense) for the product or service being estimated bears to the total estimated cost to be incurred (less G&A expense) for the performing organization. This latter amount is the base for allocation of the G&A expenses and should be readily obtainable from the supporting documentation. An example of this computation is shown below:

b. From the illustration in section III.G., the following data are obtained:

Total costs incurred (less G&A expenses) for the product/service being estimated	$3,255,000
Total costs incurred in Organization A (less G&A expenses)	51,500,000
Assume total annual cost of capital for assets required	250,000

The cost of capital applicable to the product or service being estimated would be computed as follows:

$$\frac{\$\ 3,255,000}{\$51,500,000} \times \$250,000 = \quad \$ \quad 15,800$$

5. Disposal of Fixed Assets

a. When a product/service is being produced in-house by Federal employees, a decision to contract that operation may eliminate the need for all or some portion of the fixed assets used in providing the product or service. The value to the Government of reducing this need must be included as a consideration in the comparative cost analysis. This section deals with those fixed assets which will be disposed of if a decision is made to contract for the product or service.

b. In determining such costs for consideration in a comparative analysis, the current market value of each of the fixed assets must be ascertained. If the property is to be disposed of by GSA or the Defense Property Disposal Service, assistance may be obtained from the office concerned to estimate current market value and disposal costs. Also, estimates of the market value of equipment may be based on commercial publications which list sales prices of used machinery and equipment. Assistance in this regard may also be available from dealers in the specific equipment for which an estimate is needed.

c. After an estimate is made of the current market value of the fixed asset to be disposed of, an estimate will be made of the expenses connected with the disposition, i.e., sales commission, advertising, legal fee, relocation, etc. The total expenses related to the disposal will be deducted from the estimated market value to determine the net value to the Government of the fixed asset.

d. The net book value of the assets to be disposed of will be determined by reference to the amounts determined in D.3., above. The totals of the estimated net value and net book value for these assets will be determined. The net estimated gain or loss from the disposal of these assets will be calculated by deducting the net book value from the estimated net value of the assets. It is this estimated gain or loss that will be the basis for calculating the amount to be included on line 28 of the Cost Comparison Form. The gain or loss will be multiplied by a factor of 10% to ascertain the annual value to the government of the gain or loss. For purposes of this cost comparison, the net gain that could be realized by disposal of the assets is considered to be a source of additional revenue to the Government. Accordingly, when a gain is indicated, the amount determined from applying the cost of capital factor is considered as potential revenue and will be treated as an

offset (reduction) to the cost of contracting out. Conversely, when a loss is indicated, the amount determined by applying the cost of capital factor must be considered as an addition to the cost of contracting-out.

6. Supporting Documentation.

a. Supporting documentation for the cost of capital related to the assets to be utilized shall include a detailed listing of such assets and the net book value of each. If these assets have been previously listed in connection with the computation of depreciation, a reference may be made to that listing rather than duplicating it. Where, because of the magnitude of the assets involved, it would not be practical to prepare such a list, the assets may be supported by a listing of logical groupings by types of assets and reference made to where the detailed supporting property records may be examined.

b. Supporting documentation for the cost of capital related to the assets to be disposed of shall include a list of the assets noting the market value and disposal expenses associated with each asset. The listing should also include references to more detailed documentation which indicates how the market value and disposal expense figures were determined.

E. ONE-TIME COSTS

1. In every case where the Government either starts or discontinues an in-house activity it incurs one-time costs resulting from changing the source of the product or service it uses. For new starts, the one-time costs are those associated with establishing the in-house capability and discontinuing a contract arrangement. For conversions, the one-time costs arise from terminating the in-house activity and starting a contract arrangement. Even though these costs are incurred only once and will not recur unless the mode of performance again changes, the impact on total costs may be significant. All one-time costs will be allocated over a five-year period.

2. Guidance involved in determining one-time costs for new starts and conversions is contained in the following paragraphs.

3. <u>One-Time Costs Related to a New Start -- Line 19</u>

a. While a new start may require substantial new investment by the Government in facilities and equipment, these costs should not be included as one-time costs under this section. Instead, such costs should be handled in accordance with the sections of this Handbook which deal with depreciation (III.D.4.c.) and cost of capital (V.D.). The costs of acquiring a facility, however, and costs incurred for the acquisition and installation of equipment (unless included in the capitalized cost), would need to be included in one-time cost estimates. Other examples of one-time costs would include office and plant rearrangements; employee recruitment, training, clearance, and relocation expenses; and expenses which are the direct result of discontinuing an existing contract. If the contract is completed, it is not normal that any additional costs will be borne by the Government.

b. Determination of the full scope of the Government's one-time new start costs should be made in consultation with engineering, production, management, and contracting personnel. Supporting documentation should indicate clearly the type of new start costs anticipated and the methodology used to estimate the amounts to be incurred. The detail supporting the estimate of each element of cost should be similar to that provided for in Chapter III. One-fifth of the total one-time costs should be added to each year of the cost comparison by entering the one-fifth figure(s) on line 19.

4. <u>One-Time Costs Related to a Conversion -- Line 25</u>

a. When the Government discontinues an in-house activity to obtain the product or service by contract there are usually substantial one-time costs associated with the conversion. These costs are identified and discussed in the following paragraphs.

b. <u>Material-Related Costs</u> -- A conversion will normally result in certain items of material (either unissued material, work in process, or finished goods) becoming excess.

(1) It may be possible to transfer certain of this material to the contractor who is going to provide the product or service in the future. In this case, the material will be treated as Government-furnished material and priced in accordance with section IV.F.3.

(2) In other cases, the material may be diverted to other uses of the Government. Only the additional costs incurred in connection with making the material available for the other uses will be included as conversion costs.

(3) When neither of the above dispositions of the material is practical, the material will normally be disposed of by sale. If it is anticipated that the material will be sold, the estimated gain or loss on the sale must be considered in determining conversion costs. The estimated gain or loss will be computed by deducting from the estimated sales price the acquisition cost of the material plus material overhead (at the rate developed in Chapter III) and all other expenses related to disposition, such as packing, shipping, etc. If the material is to be disposed of by either GSA or the Defense Property Disposal Service, these agencies should be consulted in arriving at these costs and estimating the sales price.

(4) The supporting documentation for such costs should contain a listing of the items and the quantity to be disposed of, their acquisition cost, and the estimated sales price. In addition, all other expenses such as packing, shipping, disposal, etc., should be adequately supported by documentation describing how the amounts were determined.

c. <u>Labor-Related Costs</u> -- A conversion will also normally result in the incurrence of certain labor-related expenses that are considered one-time costs. These include severance pay, homeowner's assistance, pay rate retention, relocation and retraining expenses. The amount of these expenses should be computed in consultation with management and the personnel department. Historical data from the agency or from other agencies gathered from similar circumstances can be considered in arriving at the appropriate cost. The supporting documentation should contain appropriate detail and indicate how the various amounts were determined.

NOTE: When a conversion results in a reduction in force (RIF), there may be an impact on Civil Service retirement costs. Some employees could take premature retirement, which may increase costs; others could withdraw, which would reduce costs. The actuarial model used to compute the standard retirement cost factor (20.4%) provides for normal

levels of early retirement and withdrawals, but any significant number of actions could have additional impact. In cases where this effect is likely to have a determinative bearing on the outcome of the cost comparison, the situation will be called to the attention of the agency official responsible for Circular A-76, who may confer with OMB on proper consideration.

d. Other Costs -- A conversion will normally require an agency to take certain actions that would not be necessary if the activity were to be continued. For example, a special physical inventory to ascertain the material (supplies, equipment, small tools, etc.) on hand may be necessary in connection with a transfer of accountability to a contractor. The cost of taking such an inventory would be a proper conversion cost. Also, it may not be possible to avoid the continuation of some costs, such as lease or rental agreements for facilities or equipment, beyond the time that they are no longer required. These are also conversion costs. Supporting documentation for such costs should clearly state the purpose for each item of cost, and how the associated dollar amount was determined.

e. General and Administrative Expense -- An amount for general and administrative expense must be included. That amount will be determined by applying the G&A rate developed in Chapter III to the sum of the material-related, labor-related and other costs.

f. Final Computation and Documentation -- The amount for general and administrative expense must be added to the sum of the costs to which the G&A rate was applied to establish the total one-time costs related to a conversion. The detail supporting the estimate of each element of cost should be similar to that provided for in Chapter III. One-fifth of the total one-time costs should be added to each year of the cost comparison by entering the one-fifth figure(s) on line 25.

F. UTILIZATION OF GOVERNMENT CAPACITY -- Line 24

1. The potential impact on a work center of contracting out for a product or service which it currently provides must be taken into consideration before a decision is made. The decision to contract out can result in the work center becoming completely idle, operating at a reduced capacity, or operating at the same or increased capacity.

2. When the decision to contract out will result in the work center becoming completely idle because no other use of its capacity is planned, its facilities will either be disposed of or placed in standby status. The circumstances under which the costs related to placing assets in standby status will be considered as an additional cost of contracting out are set forth in the Standby Costs portion of this Handbook. When the assets are to be disposed of, they will be handled in accordance with section V.D.

3. When it is planned that the efforts of the work center will not be reduced because the product or service to be contracted out will be replaced by others, consideration should be given to any savings or additional costs to the Government resulting from transferring the replacement products or services. Where the transfer of effort will result in the disposal of Government assets related to the replacement product or service or the avoidance of rental costs, these occurrences should be treated as if they were happening in the work center which currently provides the product or service being estimated. See sections V.D.5. and III.D.4.d. for further guidance in this regard.

4. Where the decision to contract out will result in the work center(s) operating at less than its present level of utilization, the costs attributable to this underutilized capacity must be determined. In these cases, some overhead costs which would be partially allocable to the product or service being contracted out may continue. These continuing overhead costs must be absorbed by the remaining in-house activities. The additional amount to be absorbed by the remaining activities is a cost of contracting out.

5. For purposes of this Handbook, the cost of underutilization will be determined as follows:

a. Step 1: From the supporting documentation for operations overhead, determine the total operations overhead expense pool(s), the total amount of the base of allocation and the resultant overhead rate. From the example shown in discussing operations overhead, these amounts would be as follows:

	Basic Pool	Machine Pool
Overhead Expense	$1,500,000	$3,000,000
Base of Allocation	$9,000,000	50,000 machine hours
Overhead Rate	16.67% of direct costs	$60.00/machine hour

b. Step 2: Again, from the supporting detail of the Government cost estimate, ascertain the amount of the base(s) of allocation applicable to the product or service being estimated. These amount(s) will then be deducted from the total base(s) of allocation. As illustrated in section III.D., the product/service A-3 incurred direct costs of $1,800,000 and 40,000 machine hours. Thus, we would show:

	Direct Costs	Machine Hours
Total Base of Allocation	$9,000,000	50,000 hours
Less:		
Applicable to Product/ Service Being Estimated (A-3)	$1,800,000	40,000 hours
Adjusted Base of Allocation	$7,200,000	10,000 hours

c. Step 3: In consultation with accounting and management personnel, ascertain the decreases in overhead expenses that can be expected to occur if the product/service is contracted out. Deduct these decreases from the appropriate overhead pool. Assume that, as a result of contracting out, the total basic overhead pool will be reduced by $500,000 and the machine pool by $2,000,000. This would result in the following:

	Basic	Machine
Total Overhead Expense	$1,500,000	$3,000,000
Less Reductions due to Contracting Out	500,000	2,000,000
Adjusted Overhead Pool	$1,000,000	$1,000,000

d. Step 4: Ascertain the overhead rate to be applied to the remaining effort. The overhead rate will be developed by dividing the adjusted overhead pool developed in Step 3, above, by the adjusted allocation base developed in Step 2, as follows:

	Basic	Machine
Adjusted Overhead Pool (From Step 3)	$1,000,000	$1,000,000
Adjusted Base of Allocation (From Step 2)	$7,200,000	10,000 hours
Overhead Rate (Pool ÷ Base)	13.89%	$100.00 per hour

e. Step 5: Ascertain the difference between the amount of overhead costs applicable to the effort which is to be continued in-house in both circumstances. In our illustration, this would be done as follows:

Product/Service (Portion of Allocation Base)		Basic (Direct Costs)	Machine (Machine Hours)
A-1		$4,500,000	5,000 hrs.
A-2		2,700,000	5,000 hrs.
Total	(A)	$7,200,000	10,000 hrs.
Overhead Rates if Performed In-House (From Step 1)	(B)	16.67%	$60.00/hour
Overhead Amount if Performed In-House (A) x (B) =	(C)	$1,200,240	$ 600,000
Overhead Rates if Contracted Out (From Step 4)	(D)	13.89%	$100.00/hour
Overhead Amount if Contracted Out (A) x (D) =	(E)	$1,000,000	$1,000,000
Increase (Decrease) in Overhead Charged to Remaining Products Due to Contracting Out (E) - (C)		($200,240)	$ 400,000

f. The increase in cost due to contracting out is the sum of the differences shown above, or $199,760 [$400,000 - $200,240]. This increased cost should be added to the cost of contracting out for the first year in the period of performance, and for each subsequent year unless it is likely that the agency will dispose of or be able to more fully utilize the excess capacity through reorganization or reallocation of work. The supporting documentation should contain the adjustments made to the overhead expense pool and explain how they were computed.

g. If the product or service being estimated represents more than 5% of the general and administrative expense allocation base (total costs incurred minus general and administrative expenses), computations similar to those above should also be made for the general and administrative expense rate. Similarly, the impact of contracting-out a product or service on material overhead should be determined

if the material content of the product or service is 5% of the total material costs.

G. FEDERAL TAXES -- Line 27

1. When comparing the cost to the Government of a product or service obtained by contract with the cost of in-house performance, the potential Federal income tax revenues must be considered. Since contract performance would provide the contractor with income subject to tax, an estimated amount of such taxes is an appropriate deduction from the net cost to the Government of acquiring the product or service by contract, unless the prospective contractor is a tax-exempt organization.

2. To simplify the tax computation, a table (Appendix 1) prepared by the Internal Revenue Service provides, by types of industry, appropriate tax rates in relation to business receipts. The industry groupings conform to the Enterprise Standard Industrial Classification issued by the Department of Commerce. To determine the amount of the estimated Federal income tax, the contract price (line 10 of the Cost Comparison Form) shall be multiplied by the tax rate in Appendix 1, which is applicable to the industry identified with the product or service under consideration. The result of this computation, the estimated amount of Federal income tax, will be entered on line 27 as a deduction from the cost of contracting.

H. OTHER ADDITIONS/DEDUCTIONS

Space has been provided on the Cost Comparison Form for any additions to or deductions from the cost of in-house performance or contracting-out not specifically covered by any of the foregoing classifications of costs (see lines 20, 21, 26, and 29). Amounts entered on these lines should be supported by a definition of the type of cost, a justification for inclusion, a description of the methods of computation used, and if appropriate, a detailed listing of specific cost elements included therein.

CHAPTER VI - COST DIFFERENTIALS

A. GENERAL. Different cost margins have been established by OMB Circular A-76 that must be exceeded before initiating a "new start" (in-house), and before converting an in-house activity to a contract. Details pertaining to these cost margins and the methods by which they are to be determined are set forth in the following paragraphs.

B. CONVERSION -- Line 32

1. Conversion, for purposes of OMB Circular A-76 and this Handbook, concerns only a change from in-house to contract performance. The opposite change, that is, from a contract to in-house performance, is considered a "new start" and is covered in paragraph C below. When a possible conversion is being considered, a cost margin equal to 10% of the in-house personnel-related costs must be added to the cost of contracting-out on the Cost Comparison Form. This amount is added to give consideration in the cost comparison to the loss of production, the temporary decrease in efficiency and effectiveness, and other unpredictable risks that result any time a change is made in the method of operation from in-house to contract. It also takes into consideration the personnel turbulence that results from such a change.

2. Computation of this personnel-related cost margin is identical to the computation of the personnel-related portion of the cost margin for a new start. Accordingly, the personnel-related portion of Steps 1 through 6, below, will be followed to compute the cost margin. The resulting amount will be added to the cost of contracting-out by entry on line 32 of the Cost Comparison Form for each year of the analysis.

C. NEW START -- Line 31

1. A new start, for purposes of OMB Circular A-76 and this Handbook, refers to any activity not currently being done in-house at a particular location. When a comparative cost analyis is conducted for a possible "new start", a cost margin equal to 10% of the estimated Government personnel-related costs plus 25% of the estimated cost of ownership of the required facilities and equipment must be added to the cost of in-house performance on the Cost Comparison Form. For this purpose, ownership costs will be considered to be the product's or service's prorata share of the depreciation

and cost of capital that are applicable to the required assets.

2. The margin of 10% of estimated personnel costs is consistent with the margin favoring the status quo in studies of existing Government activities. (See paragraph B. above.) The additional margin, 25% of the cost of ownership of the required facilities and equipment, recognizes the risks inherent in Government investment in industrial facilities, and provides a tangible expression of the basic policy of the circular.

3. The method of computing the cost margin for a "new start" is illustrated in the following steps. Data from the figures provided in sections III.D. and G., as they pertain to Product A-3, will be used to the extent possible. Since these examples do not contain all the data necessary for the computation (e.g., direct labor, material overhead data), certain additional assumptions pertaining to Product A-3 are necessary. These assumptions and the steps in the computation of the cost margin are shown below:

a. Step 1. Determine the amount of direct labor applicable to the product or service being estimated. This will be the amount shown on line 3 of the Cost Comparison Form.

EXAMPLE: For product A-3, this amount is assumed to be $1,000,000 of its $1,800,000 direct costs. Based on this assumption, the direct labor amount that would be shown on line 3 is $1,000,000.

b. Step 2. Determine the prorata share of the indirect labor and depreciation contained in each overhead pool that is applicable to the product or service being estimated. The total indirect labor and depreciation contained in each overhead pool should be readily available from the detail utilized to develop the various overhead rates, which is to be included as supporting documentation.

EXAMPLE: To the extent data were available in the examples used in various sections of the Handbook, they have been utilized; otherwise, the assumptions made are stated.

(1) Material Overhead Assume that $600,000 of the direct costs of $1,800,000 shown for Product A-3 in the Operations Overhead section represent direct material costs.

This would normally be obtained from line 1 of the Cost Comparison Form. Also, assume that in the material overhead pool there are total indirect labor costs of $500,000 and depreciation costs of $100,000; also, the total material costs (direct and indirect) in the allocation base are $4,800,000. These data should normally be available from the documentation supporting material overhead. The following computation for Product A-3 can then be made:

(a) Determine the ratio of Product A-3's direct material cost to the total allocation base:

$$\frac{600{,}000}{4{,}800{,}000} = 12.5\%$$

(b) Apply the above ratio to the total indirect labor and depreciation in the material overhead pool to arrive at the amounts thereof applicable to Product A-3:

Indirect Labor, $500,000 x 12.5% = $ 62,500

Depreciation, $100,000 x 12.5% = $ 12,500

(2) Operations Overhead From the illustration in the Operations Overhead section, the following data are available:

Total Indirect Labor in Basic Pool	$1,170,000
Indirect Labor in Machine Pool	$ 930,000
Total Depreciation in Basic Pool	$ 40,000
Total Depreciation in Machine Pool	$ 400,000
Total Allocation Base (direct costs) of Basic Pool	$9,000,000
Total allocation base (machine hours) of Machine Pool	50,000 hours
Direct Costs of Product A-3	$1,800,000
Machine Hours applicable to Product A-3	40,000 hours

(a) The computations for the two pools would be as follows:

Basic Pool

$$\frac{\$1{,}800{,}000}{\$9{,}000{,}000} = 20\%$$

Indirect Labor, $1,170,000 x 20% = $ 334,000

Depreciation, $40,000 x 20%	= $	8,000

Machine Pool

$\frac{40{,}000 \text{ hours}}{50{,}000 \text{ hours}} = 80\%$

Indirect Labor, $930,000 x 80%	= $	744,000
Depreciation, $400,000 x 80%	= $	320,000

(b) Summary

Total indirect labor in operations overhead applicable to Product A-3 = $1,078,000

Total depreciation in operations overhead applicable to Product A-3 = $ 328,000

(3) General and Administrative (G&A) Expense From the illustrations in the G&A Expense section, the following data are available:

Executive, Professional, and Technical Supervision Salaries	$1,450,000
Clerical and Other Salaries	1,175,000
Total Indirect Labor	$2,625,000
Total Allocation Base (total cost incurred, exclusive of G&A)	$51,500,000

(a) Assume:

Depreciation included in the $3,100,000 of Other Expenses is	$ 100,000
The total incurred costs, exclusive of G&A, applicable to Product A-3 are	$4,940,000

(b) Then the computation to determine the indirect labor and depreciation in G&A applicable to product A-3 would be as follows:

$\frac{\$\ 4{,}940{,}000}{\$51{,}500{,}000} = 9.6\%$

Indirect Labor, $2,625,000 x 9.6%	= $	252,000
Depreciation, $100,000 x 9.6%	= $	9,600

c. Step 3. Accumulate all the labor costs applicable to the product or service being estimated, as developed in Steps 1 and 2:

EXAMPLE:

Direct Labor (from Step 1)	$1,000,000
Indirect labor (from Step 2)	
Material Overhead	62,500
Operations Overhead	1,078,000
G&A Expense	252,000
Total Labor applicable to Product A-3	$2,392,500

d. Step 4. Apply the fringe benefits rate(s) developed in accordance with section III.C.2. to the labor costs developed in Step 3, above.

EXAMPLE: Assume a single fringe benefit rate of 38% has been developed. Then,

$2,392,500 x 38% = $ 909,150

e. Step 5. Combine the amounts developed in Steps 3 and 4 to arrive at total personnel-related costs.

EXAMPLE: $2,392,500 + $909,150 = $3,301,650

f. Step 6. Compute 10% of the amount developed in Step 5 to determine the personnel-related cost margin.

EXAMPLE: $3,301,650 x 10% = $ 330,165

g. Step 7. Accumulate the depreciation applicable to the product or service being estimated as developed in Step 2.

EXAMPLE:

Depreciation from Step 2:

Material Overhead	$ 12,500
Operations Overhead	$ 328,000
General and Administrative Expense	$ 9,600
Total depreciation applicable to Product A-3	$ 350,100

h. Step 8. Determine the Cost of Capital that is applicable to the product or service being estimated. The Cost of Capital will be computed in accordance with section V.D. and entered on line 18 of the Cost Comparison Form. Assume the cost of capital applicable to the facilities and equipment required to provide Product A-3 is $300,000.

i. Step 9. Combine the amounts of Depreciation and Cost of Capital developed in Steps 7 and 8 to arrive at the total ownership costs of the required facilities and equipment.

EXAMPLE:
Amounts Applicable to Product A-3

Depreciation	$ 350,100
Cost of Capital	$ 300,000
Total Ownership Costs	$ 650,100

j. Step 10. Compute the ownership cost margin by applying 25% to total ownership costs.

EXAMPLE: $650,100 x 25% $162,525

k. Step 11. Combine the personnel-related margin developed in Step 6 and the ownership margin developed in Step 10 to arrive at the total cost margin for a new start.

EXAMPLE:

Personnel margin	$ 330,165
Ownership margin	162,525
Total cost margin for new start	$ 492,690

l. Step 12. Enter the cost margin developed in Step 11 on line 31 of the Ccst Comparison Form for each year of the analysis.

APPENDIX 1

TAX COMPUTATION TABLE
(Tax Rates are in relation to Business Receipts)

Code No.	Industry	Tax Rate (%)
	Extractive Industries	
10-01-0400	Agriculture Production	2
10-01-0600	Agricultural Services	1
20-02-1010	Mining Iron Ores	2
20-02-1070	Mining Copper, Lead, Zinc, Gold and Silver Ores	5
20-02-1098	Mining Other Metals	1
20-03-1150	Coal Mining	7
20-05-1430	Sand, Gravel, Dimension, Crushed and broken Stone	2
	Construction	
30-06-1510	General building (construction)	1
30-06-1531	Operative builders (construction)	1
30-07-1600	Heavy construction	2
30-08-1711	Plumbing, heating, air-conditioning	1
30-08-1731	Electrical work	1
30-08-1798	Other special trades	1
	Manufacturing	
40-09-2010	Meat products	1
40-09-2020	Dairy products	2
40-09-2030	Preserved fruits and vegetables	2
40-09-2040	Grain mill products	2
40-09-2050	Bakery products	1
40-09-2060	Sugar and confectionary products	4
40-09-2089	Bottled soft drinks and flavorings	3
40-09-2096	Other food and kindred products	2
40-12-2315	Men's and Boy's clothing	1
40-12-2345	Women's and children's clothing	1
40-12-2388	Other apparel and accessories	2
40-12-2390	Other fabricated textile products	2
40-13-2415	Logging, sawmills, and planing mills	3
40-13-2430	Millwork, plywood, related products	1
40-13-2498	Other wood products	2
40-14-2500	Furniture and fixtures	2
40-15-2625	Pulp, paper and board mills	4
40-15-2699	Other paper products	4
40-16-2710	Newspapers (printing and publishing)	4

40-16-2720	Periodicals (printing and publishing)	2
40-16-2735	Books, greeting cards, and miscellaneous publishing	3
40-16-2799	Commercial and other printing and printing trade services	2
40-17-2815	Industrial chemicals, plastics materials and synthetics	4
40-17-2830	Drugs	3
40-17-2840	Soap, cleaners, and toilet goods	4
40-17-2850	Paints and allied products	2
40-17-2898	Agricultural and other chemical products	5
40-18-2998	Petroleum and coal products, not elsewhere classified	3
40-19-3050	Rubber products; plastics, footwear, hose and belting	2
40-19-3070	Miscellaneous plastics products	2
40-20-3140	Leather footware	1
40-20-3198	Leather and leather products not elsewhere classified	2
40-21-3225	Glass products	2
40-21-3240	Cement, hydraulic	2
40-21-3270	Concrete, gypsum, and plaster products	1
40-21-3298	Other nonmetallic mineral products	2
40-22-3370	Ferrous metal industries; miscellaneous primary metal products	3
40-22-3380	Nonferrous metal industries	2
40-23-3410	Metal cans and shipping containers	3
40-23-3428	Cutlery, hand tools, and hardware, screw machine products, bolts, and similar products	4
40-23-3430	Plumbing and heating, except electric and warm air	3
40-23-3440	Fabricated structural metal products	2
40-23-3460	Metal forgings and stampings	2
40-23-3470	Casting, engraving, and allied services	2
40-23-3480	Ordnance and accessories, except vehicles and guided missiles	1
40-23-3490	Miscellaneous fabricated metal products	3
40-24-3520	Farm machinery	2
40-24-3530	Construction and related machinery	3
40-24-3540	Metalworking machinery	3
40-24-3550	Special industry machinery	2
40-24-3560	General industrial machinery	2
40-24-3570	Office and computing machines	8
40-24-3598	Other machinery, except electrical	2

40-25-3665	Radio, television, communication equipment	1
40-25-3670	Electronic components and accessories	2
40-25-3698	Other electrical equipment	2
40-26-3710	Motor vehicles and equipment	1
40-27-3725	Aircraft, guided missiles and parts	1
40-27-3730	Ship and boat building and repairing	2
40-27-3798	Other transportation equipment, except motor vehicles	2
40-28-3815	Scientific instruments and measuring devices; watches and clocks	2
40-28-3845	Optical, medical, and opthalmic goods	4
40-28-3860	Photographic equipment and supplies	7
40-29-3998	Miscellaneous manufacturing and manufacturing not allocable	2

Transportation And Utilities

50-30-4000	Railroad transportation	2
50-30-4100	Local and interurban passenger transit	1
50-30-4200	Trucking and warehousing	1
50-30-4400	Water transportation	3
50-30-4500	Transportation by air	1
50-30-4600	Pipe lines, except natural gas	3
50-30-4700	Transportation services, not elsewhere classified	1
50-31-4825	Telephone, telegraph, and other communication services	3
50-31-4830	Radio and television broadcasting	5
50-32-4910	Electric services	2
50-32-4920	Gas production and distribution	3
50-32-4930	Combination utility services	1
50-32-4990	Water supply and other sanitary services	2

Wholesale Trade

61-33-5004	Groceries and related products	1
61-34-5008	Machinery, equipment, and supplies	2
61-35-5010	Motor vehicles and automotive equipment	1
61-35-5030	Lumber and construction materials	1
61-35-5050	Metals and minerals, except petroleum and scrap	2
61-35-5060	Electrical goods	1

61-35-5070	Hardware; plumbing, and heating	1
61-35-5098	Other durable goods	1
61-35-5110	Paper and paper products	1
61-35-5129	Drugs, chemicals, and allied products	2
61-35-5130	Apparel, piece goods, and notions	1
61-35-5150	Farm-product raw materials	1
61-35-5170	Petroleum and petroleum products	1
61-35-5180	Alcoholic beverages	1
61-35-5190	Miscellaneous nondurable goods; wholesale trade not allocable	1

Retail Trade

62-36-5220	Building materials dealers	1
62-36-5251	Hardware stores	1
62-36-5265	Garden supplies and mobile home dealers	1
62-37-5300	General merchandise stores	1
62-38-5400	Food stores	1
62-39-5541	Gasoline service stations	2
62-39-5598	Other automotive dealers	1
62-40-5600	Apparel and accessory stores	1
62-41-5700	Furniture and home furnishings stores	1
62-42-5800	Eating and drinking places	1
62-43-5912	Drug stores and proprietary stores	1
62-43-5921	Liquor stores	1
62-43-5995	Other retail stores	1
63-44-5997	Wholesale and retail trade not allocable	1

Services

80-52-7000	Hotels and other lodging places	1
80-53-7200	Personal services	2
80-54-7310	Advertising services	1
80-54-7389	Business services, except advertising	2
80-55-7500	Auto repair and services	1
80-55-7600	Miscellaneous repair services	1
80-56-7812	Motion picture production, distribution, and services	2
80-56-7830	Motion picture theaters	2
80-56-7900	Amusement and recreation services, except motion pictures	3
80-57-8015	Physicians' services	1
80-57-8021	Dentists' services	0.4
80-57-8050	Nursing and personal care facilities	1
80-57-8071	Medical laboratories	2
80-57-8099	Other medical services	1

		5
80-57-8111	Legal services	0.4
80-57-8200	Educational services	1
80-57-8599	Miscellaneous services, not elsewhere classified	1

GLOSSARY OF TERMS

The definitions presented below are taken from the text of this handbook, procurement regulations, and other authoritative publications.

ACQUISITION COST. The amount paid to acquire an asset (Chapter III, Operations Overhead).

ACTUAL COST. An amount based on cost incurred as distinguished from estimated costs; includes standard cost properly adjusted for applicable variance (Chapter III, Fringe Benefits).

ALLOCATE. To assign an item of cost or a group of items of cost to one or more cost objectives. This term includes both direct assignment of cost and the reassignment of a share from an indirect cost pool (Chapter III, Operations Overhead).

ALLOCATION BASE. The denominator in the fraction used to develop an overhead rate. It is either the total of some element of expense (or group thereof) or a quantitative measure that is common to all items or activities to which the indirect costs are to be allocated (Chapter III, Material Overhead, Operations Overhead, G&A Expenses).

AMORTIZATION. The gradual extinguishment of any amount over a period of time, such as the write-off of a portion or all the cost of an asset, or the retirement of a debt over a period of years (Chapter IV, Government-Furnished Facilities).

AWARD-FEE CONTRACT. A cost reimbursement-type contract with special fee provisions. It provides a means of applying incentives in contracts which are not susceptible to finite measurements of performance necessary for structuring incentive contracts (Chapter IV, Contract Price).

BASIC LABOR RATE. For Wage Board employees, the basic labor rate is the hourly rate to be applied to all hours worked and to all hours of annual leave earned, and sick, holiday and other leave taken. The General Schedule (GS) basic rate is the published annual rate of pay for the particular GS grade and step level (Chapter III, Direct Labor).

BILL OF MATERIAL. A detailed listing of the material requirements for performing a service or providing a product (Chapter III, Direct Material).

CAPITALIZED COST. The cost of acquiring, installing and modifying a tangible capital asset that has been added to an asset account (Chapter V, One-Time Costs).

CARTAGE. Transportation from a freight terminal to the point of use or consumption (Chapter IV, Transportation).

CONTRACT ADMINISTRATION COSTS. The costs incurred by the Government in assuring that a contract is faithfully executed by both the Government and the contractor (Chapter IV, Contract Administration).

CONVERSION. The transfer of work from a Government commerical or industrial activity to performance by a contractor (Chapter V, One-Time Costs).

COST COMPARISON (or COMPARATIVE COST ANALYSIS). An accurate determination of whether it is more economical to acquire the needed products or services from the private sector or from an existing or proposed Government commercial or industrial activity (Chapter I, Policy).

COST DIFFERENTIALS. The cost margins established by OMB Circular A-76 that must be exceeded before performing a "new-start" in-house and before converting an in-house activity to contract performance (Chapter VI, Cost Differentials).

COST ELEMENT. A basic unit of cost, such as labor or material. The accumulation of all the basic units related to a given product or service provides the total cost of that product or service (Chapter III, General).

COST OBJECTIVE. A function, organizational subdivision, contract, or other work unit for which cost data are desired and for which provision is made to accumulate and measure the cost of processes, products, jobs, capitalized projects, etc. (Chapter III, General).

COST OF CAPITAL. An imputed charge on the Government's investment in all of the plant facilities and other assets necessary for the work center to manufacture

products or provide services (Chapter V, Cost of Capital).

COST OF CAPITAL COMMITTED TO FACILITIES. An imputed cost determined by applying a cost of money rate to facilities' capital (Chapter V, Cost of Capital).

COST REIMBURSEMENT CONTRACT. A type of contract that provides for reimbursement to the contractor of allowable costs incurred in the performance of a contract, to the extent prescribed in the contract (Chapter IV, Contract Price).

CURRENT COSTS. Costs incurred in the current accounting period (Chapter III, Direct Material).

CURRENT MARKET VALUE. The amount for which an item could be sold in today's market (Chapter V, Cost of Capital).

DEMURRAGE. The compensation paid for the delaying of a ship, freight car, etc., as by the failure to load, unload, or dispatch within the time allowed (Chapter IV, Transportation Cost).

DEPRECIATION. The method used to spread the cost of tangible capital assets (plant, machinery, etc.), less residual value, over their estimated useful lives in a systematic and logical manner (Chapter III, Operations Overhead).

DIRECT COST. Any cost which can be identified specifically with a particular final cost objective. Direct costs are not limited to items which are incorporated in the end product as material or labor. Costs which can be identified specifically with a product/service are direct costs of that product/service. All costs identified specifically with other products/services are direct costs of those products/services. (Chapter III, General).

DIRECT LABOR. That portion of salaries and wages which, as a practical matter, can be identified with and charged only to a specific product or service (Chapter III, Direct Labor).

DIRECT MATERIAL. The costs of such goods as raw material, parts, sub-assemblies, components and supplies which, as a practical matter, can be identified specifically

with the product/service (the final cost objective) under review (Chapter III, Direct Material).

DOUBLE-COUNTING. The treatment of certain costs as direct costs of the product/service, while similar costs related to other products/services are treated as indirect costs and a portion thereof is allocated to the product/service for which the estimate is being prepared (Chapter III, General).

ESTIMATING COST. The process of determining a future or past result in terms of cost, based upon information available at the time (Chapter III, General).

FINAL COST OBJECTIVE. A cost objective which has allocated to it both direct and indirect costs, and, in the cost accumulation system, is one of the final accumulation points (Chapter III, General).

FIRM-FIXED-PRICE CONTRACT. A contract which provides for a price which is not subject to any adjustment by reason of the cost experience of the contractor in performance of the contract (Chapter IV, Contract Price).

FISCAL YEAR. The accounting period for which annual financial statements are regularly prepared. The Government's Fiscal Year begins on October 1, and ends on September 30 (Chapter III, Operations Overhead).

FIXED PRICE CONTRACT WITH FLEXIBLE PRICING ARRANGEMENTS. This type of contract provides for either a firm-fixed-price for an initial period and for prospective price redetermination at stated times during the performance of the contract or a ceiling price and retroactive price redetermination after completion of the contract (Chapter IV, Contract Price).

FRINGE BENEFITS. Allowances and services provided employees as compensation in addition to basic salaries and wages (Chapter III, Fringe Benefits).

FULL COSTS. The total of all direct and indirect costs allocable to a product or service (Chapter III, Direct Material).

GENERAL AND ADMINISTRATIVE (G&A) EXPENSE. Any management, financial and other expense which is incurred by or

allocated to an organizational unit and which is for the general management and administration of the unit as a whole. G&A expense does not include those management expenses whose beneficial or causal relationship to cost objectives can be more directly measured by a base other than a cost input base representing the total activity of the unit during a cost accounting period. (Chapter III, General and Administrative Expense).

GOVERNMENT-FURNISHED FACILITIES AND EQUIPMENT. Facilities and equipment in the possession of or acquired directly by the Government, and subsequently delivered or otherwise made available to the contractor (Chapter IV, Government-Furnished Property).

INCREMENTAL COST. The increases or decreases in total cost, or the changes in specific elements of cost, that result from variations in operations (Chapter III, Operations Overhead).

INDIRECT COSTS. Any cost not directly identified with a single final cost objective, but identified with two or more final cost objectives or with at least one intermediate cost objective (Chapter III, General).

INDIRECT COST (OVERHEAD) POOL. A grouping of incurred (or projected) costs identified with two or more cost objectives but not identified specifically with any final cost objective (Chapter III, Operations Overhead).

INSURANCE COSTS. The cost to the Government arising from liabilities and losses not covered by insurance. The costs are incurred in consonance with the Government's policy of acting as a self-insurer (Chapter III, Operations Overhead).

INTERAGENCY SUPPORT. Products or services furnished from the capacity of another Government agency or organization to the agency which will provide the product or service being estimated (Chapter III, Interagency Support).

LABOR HOUR CONTRACT. A variant of the time and material-type contract, differing only in that materials are not supplied by the contractor (Chapter IV, Contract Price).

LABOR-TIME STANDARD. A preestablished measure expressed in temporal terms, of the quantity of labor required to perform a task (Chapter III, Direct Labor).

MAINTENANCE AND REPAIR. Cost incurred to keep buildings and equipment in normal operating condition (Chapter III, Operations Overhead).

MATERIAL OVERHEAD COSTS. Indirect costs related to an activity or group of activities for acquiring,handling, and/or controlling required materials, until the materials are used or consumed in the production of goods and services or are sold without processing (Chapter III, Material Overhead).

MATERIAL-QUANTITY STANDARD. A preestablished measure, expressed in physical terms, of the quantity of material required for a specific purpose (Chapter III, Direct Material).

NET BOOK VALUE. The capitalized cost of an asset or group of assets shown in the accounting records, less accumulated depreciation or other applicable offset (Chapter V, Cost of Capital).

NEW START A newly established Government commercial or industrial activity, including a transfer of work from contract to in-house performance (Chapter V, One-Time Costs).

NO-COST BASIS. The provision of a product or service without charge or remuneration (Chapter III, General and Administrative Expense).

NOMINAL COST. Cost of a very minor amount (Chapter III, Direct Material).

ONE-TIME COSTS. The nonrecurring costs to the Government when it either starts or discontinues an in-house activity as a result of a decision to change the source of a product or service (Chapter V, One-Time Costs).

OPERATIONS OVERHEAD COSTS. The indirect costs which are necessarily incurred during a fiscal year to produce or deliver the products or services being provided by a particular organizational element (Chapter III, Operations Overhead).

OPPORTUNITY COSTS. Other income, or expense avoidance, foregone by using limited resources for a particular purpose (Chapter V, Cost of Capital).

OTHER DIRECT COSTS. All those direct costs (exclusive of direct labor and direct material) which are identified as having been incurred specifically for a particular product or service (Chapter III, Other Direct Costs).

OVERHEAD RATE. A percentage, or monetary unit related to a quantitative measure, derived by dividing an indirect cost pool by an allocation base (Chapter III, General, Material Overhead, Operations Overhead).

OVERTIME AND OTHER PREMIUM PAY. Additional amounts added to basic salaries for working longer than the regularly scheduled hours or under unusual conditions (Chapter III, Operations Overhead).

OWNERSHIP COST (or COST OF OWNERSHIP). A product's or service's prorata share of the depreciation and cost of capital applicable to the fixed assets required for performance (Chapter VI, New Start).

PRICING. The process of establishing the amount or amounts to be paid in return for goods or services (Chapter III, Direct Material).

PROPOSAL. Any offer or other submission used as a basis for pricing a contract, contract modification or termination settlement, or for securing payments thereunder (Chapter IV, Contract Price).

RENT. The cost incurred for the use of another entity's tangible assets (land, plant and machinery, etc.) in providing the product/service being estimated (Chapter III, Operations Overhead).

RESIDUAL VALUE. The proceeds (less removal and disposal costs, if any) realized upon disposition of a tangible capital asset. It usually is measured by the net proceeds from the sale or other disposition of the asset, or its fair value if the asset is traded on another asset (Chapter III, Operations Overhead).

STANDARD COSTS. Any cost computed with the use of preestablished measures (Chapter III, Direct Material, Direct Labor).

STANDARD LEVEL USER CHARGE (SLUC). The amount which the General Services Administration (GSA) assesses Federal agencies for their assigned space in GSA - controlled buildings. This SLUC rate is a composite of three ingredients:

a. the fair annual rental appraisal rate for space, utilities and normal services;

b. an escalation of this rate; and

c. an added charge for standard protection.

STANDBY MAINTENANCE COSTS. The costs necessary for the upkeep of property held in a standby status to assure contract performance. This maintenance neither adds value to the property nor appreciably prolongs its useful life. Rather, the maintenance keeps the property in an efficient operating condition so that it will be available for possible use in case of nonperformance by the contractor (Chapter IV, Standby Costs).

STRAIGHT-LINE DEPRECIATION. A method of depreciating an asset by charging an equal amount of its depreciable cost (capitalized cost less residual value) to each accounting period covered by its useful life, or by charging an equal amount of its depreciable cost to each hour of use, each product produced, etc. (Chapter III, Operations Overhead).

SUPPORT COSTS. Costs incurred by one organizational unit for the benefit of another (Chapter III, Operations Overhead).

SURCHARGE. An additional amount added to the basic charge to cover expenses incurred in providing the products or services (Chapter III, Direct Material, Material Overhead).

TANGIBLE CAPITAL ASSET. An asset that has physical substance, more than minimal value, and is expected to be held for continued use or possession beyond the current accounting period (Chapter III, Depreciation).

TIME AND MATERIAL CONTRACT. A type of contract which provides for the procurement of supplies and services on the basis of (i) direct labor hours at specified fixed hourly rates (which shall include wages,

overhead, general and administrative expense, and profit) and (ii) material at cost, and where appropriate, material handling costs as a part of material cost (Chapter IV, Contract Price).

WORK CENTER. The lowest organizational unit at which costs are accumulated (Chapter III, Operations Overhead).

WORK STATEMENT. A comprehensive description of what is to be done, including performance standards as appropriate. The work statement should describe all duties, tasks, responsibilities, frequency of performance of repetitive functions, and requirements for furnishing facilities and materials (Chapter II, Statement of Work).

CHRONOLOGICAL OUTLINE OF THE COST COMPARISON PROCESS

NOTE: The individual or group noted in the parentheses after each step is responsible for completing the action described in the step.

Step		Handbook Reference
	PRE-SOLICITATION PERIOD	
1	Establish a task group and designate a chairman (Approving Authority)	II.B.1.
2	Establish an overall plan and schedule (Task Group)	II.B.2.
3	Prepare a Statement of Work (Task Group)	II.C.
4	Review the Statement of Work (Contracting Officer)	II.C.3.
	SOLICITATION PERIOD	
5	Issue and publicize a solicitation (Contracting Officer)	II.D.1.
6	Prepare bids or proposals (Prospective Contractors)	II.D.
7	Prepare the in-house cost estimate (Task Group)*	II.D.2. III.
8	Determine additions to and deductions from the costs of in-house performance (Task Group)**	II.D.3. V.
9	Submit bids or proposals (Prospective Contractors) and the in-house estimate (Task Group) to the contracting office by the time and at the	II.D.3.

place specified in the solicitation.

BID OPENING/CONCLUSION OF NEGOTIATIONS

10	Determine the "contract price" to be entered in Line 10 of the Cost Comparison Form (Contracting Officer)	II.D.4.

COST COMPARISON

11	Complete the Cost Comparison Form (Task Group)***	II.D.5.
12	Review the Cost Comparion Form and associated documentation for conformance to the applicable guidance (Qualified Independent Party)	II.D.6.
13	Adjust the Cost Comparison Form and/or data, if necessary (Task Group)	II.D.6.
14	Certify the Cost Comparison (Qualified Independent Party)	II.D.6.
15	Originate the Decision Summary Form and send it to the Approving Authority with a recommendation (Task Group)	II.D.7,8
16	Send the approved Decision Summary Form to the Contracting Officer (Approving Authority)	II.D.9.
17	Announce the results of the cost study and allow time for interested parties to review them (Contracting Officer)	II.D.9.

ACTION

18	Act on the decision by awarding a contract or by cancelling the solicitation (Contracting Officer)	II.D.9,10

* A detailed checklist for completing this process is provided on pages 4-8 of this Appendix.

** A detailed checklist for completing this process is provided on pages 9-12 of this Appendix.

*** A detailed checklist for completing this process is provided on pages 13-17 of this Appendix.

PREPARE THE IN-HOUSE COST ESTIMATE (Step 7)

Step		Handbook Reference
7.1	Estimate Direct Material Costs by preparing a spread sheet similar to Figure 1, and completing it in accordance with text references. Enter the Total Direct Material Costs in Line 1 of the Cost Comparison Form.	III.B.2.
7.2	Estimate Direct Labor Costs, using a spread sheet similar to Figure 3 and the text references. Enter the Total Direct Labor Costs in Line 3 of the Cost Comparison Form.	III.C.1.
7.3	Estimate any Other Direct Costs. Enter the total amount in Line 6 of the Cost Comparison Form.	III.F.
NOTE:	Steps 7.4 through 7.6 involve indirect costs (defined in III.A.1.d.). There are many types of indirect costs, the most common of which are indirect labor, indirect material and supplies, depreciation, rent, maintenance and repair costs, support costs, utilities, insurance, and overtime and other premium pay. Each of these types of indirect costs is described in III.D.4. of the Handbook, in the context of Operations Overhead expenses. However, each type is likely to be represented in all three overhead pools: Operations Overhead, Material Overhead (see Figure 2) and General and Administrative Expense (see III.G.11.).	

7.4	Identify and accumulate Material Overhead costs.	III.B.3. Figure 2
7.5	Identify and accumulate Operations Overhead costs.	III.D. Figure 5
7.6	Identify and accumulate General and Administrative expenses.	III.G.
7.7	Estimate the Cost of Fringe Benefits applicable to the product/service being analyzed.	III.C.2.
7.7.1	Using the Total Direct Labor Costs (Step 7.1) and the indirect labor costs identified in Steps 7.4, 7.5 and 7.6, prepare and fill in a fringe benefits table similar to the example in Figure 4.	Figure 4
7.7.2	Apply the predetermined factors for retirement and insurance and other benefits to the appropriate total dollar amounts.	III.C.2.d.
7.7.3	Apply the actual employer contribution rate for FICA to the applicable labor costs attributable to employees covered by social security.	III.C.2.e. Figure 4
7.7.4	Sum up the costs of retirement, FICA, and insurance and other benefits calculated in Steps 7.7.2 and 7.7.3 to determine total standard fringe benefits.	Figure 4
7.7.5	Estimate the costs of any additional benefits.	III.C.2.f.
7.7.6	Add total standard fringe benefits and additional benefits together to determine Total Fringe Benefits.	Figure 4

7.8	Calculate the Fringe Benefits Rate.	III.C.2.g. Figure 4
7.9	Determine Total Material Overhead Expense by developing a schedule similar to Figure 2 with data developed in Steps 7.4 and 7.8.	Figure 2
7.10	Compute the base for distributing Material Overhead Costs. (This will often be Total Material Costs, which would be the sum of: Direct Material Costs calculated in Step 7.1; direct material costs associated with all other products/services (those not being reviewed); and indirect material and supplies costs identified in Steps 7.4, 7.5 and 7.6.).	III.B.3.d-f
7.11	Determine the Material Overhead costs applicable to the product/service being estimated.	III.B.3.d.
7.11.1	Develop a Material Overhead Rate by dividing Material Overhead Costs (step 7.9) by the appropriate base (Step 7.10).	III.B.3.e.
7.11.2	Apply the Material Overhead Rate (Step 7.11.1) to Direct Material Costs to determine the Material Overhead Costs allocable to the product/service being estimated. Enter this amount in Line 2 of the Cost Comparison Form.	III.B.3.e.
7.12	Determine Operations Overhead costs applicable to the product/service being estimated.	III.D.5.
7.12.1	Determine Total Operations Overhead Costs by completing a schedule	III.D. Figure 5

similar to Figure 5 with data developed in Steps 7.5, 7.8 and 7.11.1.

7.12.2	Establish an appropriate base or bases for the allocation of operations overhead costs to the product/service being estimated.	III.D.5.a.
7.12.3	Develop an applicable operations overhead rate or rates by dividing total or the applicable portion of operations overhead dollars (Step 7.12.1) by the amount(s) of the applicable established allocation base(s) (Step 7.12.2).	III.D.5.b.
7.12.4	Apply the operations overhead rate(s) to the part the allocation base(s) applicable to the product/service being estimated. This yields the dollar amount of operations overhead allocated to the product/service. If more than one rate/base is involved, sum up the resulting dollar amounts to obtain an overall total. Enter this amount in line 5 of the Cost Comparison Form.	Figure 5
7.13	Determine the General and Administrative expense applicable to the product/service being estimated.	
7.13.1	Determine total G& A expense with data developed in Steps 7.6, 7.8 and 7.11.1.	III.G.11.a.
7.13.2	Develop the appropriate allocation base (total costs incurred by	III.G.10. III.G.11.b.

mission functions of the organization, except for G&A expense).

7.13.3	Compute the G&A rate by dividing total G&A expenses (Step 7.13.1) by the allocation base (Step 7.13.2).	III.G.11.c.
7.13.4	Apply the G&A rate to the cost of the product/service less G&A expense. Enter the amount in line 7 of the form.	III.G.12.
7.14	Wrap up the Basic In-House Estimate	
7.14.1	Sum up the entries in lines 1 through 7 of the form for the first year, and enter the total in line 9 under the "first year" column.	Exhibit 1
7.14.2	For each subsequent year, calculate the inflation amount to be entered in line 8. Then sum up lines 1 through 8 and enter the total in line 9.	III.H. Exhibit 1

DETERMINE ADDITIONS TO AND DEDUCTIONS FROM THE COSTS OF IN-HOUSE PERFORMANCE (Step 8)

Step		Handbook Reference
8.1	Estimate the cost of capital for assets related to in-house and/or contractor performance of the function(s) being reviewed.	V.D.
8.1.1	Decide which of the six possible "use situations" the assets fall into to determine what calculations must be made and which Cost Comparison Form line numbers must be filled in.	V.D.2.
8.1.2	For assets to be utilized:	
8.1.2.1	Determine the net book value of each tangible capital asset related to performance. Sum these amounts up to calculate the Total Net Book Value of the assets.	V.D.3.a.
8.1.2.2	Compute the cost of capital by multiplying the Total Net Book Value by .10.	V.D.3.b.
8.1.2.3	Are the assets involved to be used solely to provide the product/service being estimated?	V.D.3.b.
	-- If "Yes", enter the cost of capital computed in Step 8.1.2.2 in the appropriate line(s) of the Cost Comparison Form.	V.D.3.b.
	-- If "No", prorate the cost of capital to determine the cost of capital applicable to the	V.D.4.

product/service being estimated. Enter this amount in the appropriate line(s) on the Cost Comparison Form.

8.1.3	For assets to be disposed of:	V.D.5.
8.1.3.1	Ascertain the current market value of each asset.	V.D.5.b.
8.1.3.2	Estimate the costs of disposing of each asset.	V.D.5.c.
8.1.3.3	Determine the net value to the government of each asset by subtracting disposal expenses from its market value. Sum up the individual net values to compute Total Estimated Net Value.	V.D.5.d.
8.1.3.4	Determine the net book value of each asset. Sum up individual values to compute the Total Net Book Value of the assets.	V.D.5.d.
8.1.3.5	Calculate the net estimated gain or loss from the disposal of these assets by deducting Total Net Book Value (Step 8.1.3.4) from Total Estimated Net Value (Step 8.1.3.3).	V.D.5.d.
8.1.3.6	Multiply the gain or loss figure by .10 to ascertain the annual value to the Government of the gain or loss.	V.D.5.d.
8.1.3.7	Enter the amount calculated in Step 8.1.3.6 in line 28 of the Cost Comparison Form.	V.D.5.d.

8.2	Estimate one-time new-start costs (if applicable).	V.E.3.
8.2.1	Estimate the cost of acquiring and installing new facilities and equipment.	V.E.3.a.
8.2.2	Estimate the cost of office and plant rearrangements.	V.E.3.a.
8.2.3	Estimate the cost of employee recruiting, training, and relocations.	V.E.3.a.
8.2.4	Estimate the cost of other actions directly resulting from discontinuing an existing contract.	V.F.3.a.
	NOTE: The costs of investment in new facilities and equipment should not be included in one-time new-start costs, but should be annualized in the context of cost of capital and depreciation (see V.E.3.a.).	
8.2.5	Sum up the totals of estimates derived in Steps 8.2.1 through 8.2.4 to obtain Total New Start Costs.	V.E.3.
8.2.6	Divide the Total New Start Costs by 5 and enter this amount in Line 19.	V.E.3.b.
8.3	Estimate any other costs of in-house performance. Enter the aggregate amount of such costs in line 20 of the form.	V.H.
8.4	Estimate any deductions from the cost of in-house performance which are not covered by any of the Handbook's cost classifications. Enter the total amount in line 21.	V.H.

8.5	Total the additions and deductions to obtain the amount to be entered in line 22 of the form.	Exhibit 1
8.6	Determine the new-start cost differential (if applicable). (Follow steps 1 through 12 in the text, paragraph VI.C.3.) Enter the total cost margin in line 31 of the form.	VI.C. Exhibit 1
8.7	Calculate the adjusted cost of in-house performance. Enter the amount in line 33 of the form.	Exhibit 1

COMPLETE THE COST COMPARISON FORM (Step 11)

Step		Handbook Reference
11.1	Determine the cost of transportation the Government will provide in connection with the product/service being obtained by contract. Enter this total in line 11.	IV.C.
11.2	Determine the cost of Contract Administration by applying 4% to the contract price. Enter this amount in line 12 of the Form.	IV.D.
11.3	Determine the cost of Government furnished property.	IV.E.
11.3.1	Determine the costs connected with the contractor's use of Government-furnished materials and supplies.	IV.E.3.
11.3.2	Determine the cost connected with the contractor's use of Government-furnished facilities and equipment.	IV.E.4.
11.3.3	Sum up the totals derived in Steps 11.3.1 and 11.3.2 to determine the total cost of Government-Furnished Property. Enter this total in line 13.	IV.E.2.
11.4	Determine standby maintenance costs (see Steps 11.9.2.1-5).	
11.5	Determine the amount of any other costs which would result from contracting-out. Enter the total amount of such costs in line 15.	IV.G.
11.6	Determine the in-house G&A	IV.H.

	expenses associated with contracting-out by applying the G&A rate developed in Step 7.13.3 to the total of lines 11 through 14 on the form. Enter this amount in line 16.	
11.7	Sum up lines 10 through 16 and enter the total in line 17 (after completing Steps 11.9.2.3 through 11.9.2.5, if applicable).	Exhibit 1
11.8	Determine Additions to and deductions from the Costs of Contracting.	
11.8.1	The Cost of Capital to be entered in line 23 was determined in Step 8.1.	
11.8.2	Estimate one-time conversion costs (if applicable).	V.E.4.
11.8.2.1	Estimate material-related costs of conversion.	V.E.4.b.
11.8.2.1.1	Determine how excess material will be disposed of.	V.E.4.b.
11.8.2.1.2	Estimate the gain or loss on the sale of material expected to be sold.	V.E.4.b.(3)
11.8.2.1.3	Determine the cost of transferring any material to the contractor by following Steps 11.3.1 through 11.3.3.	V.E.4.b.(1)
11.8.2.1.4	Estimate the additional costs to be incurred in making any material available for other uses in the Government.	V.E.4.b.(2)
11.8.2.1.5	Sum up totals derived in Steps 11.8.2.1.2 though 11.8.2.1.4.	
11.8.2.2	Estimate labor-related costs of conversion.	V.E.4.c.

11.8.2.3	Estimate other costs of conversion.	V.E.4.d.
11.8.2.4	Sum up amounts calculated in Steps 11.8.2.1.5, 11.8.2.2, and 11.8.2.3 for a conversion cost subtotal.	
11.8.2.5	Multiply the conversion cost subtotal (Step 11.8.2.4) by the G&A rate developed in Step 7.13.3 to arrive at applicable G&A costs.	V.E.4.e.
11.8.2.6	Add the conversion cost subtotal (Step 11.8.2.4) to applicable G&A costs (Step 11.8.2.5) for total one-time costs related to conversion.	V.E.4.f.
11.8.2.7	Divide this total (Step 11.8.2.6) by 5. Enter the one-fifth figure in line 25.	
11.9	Estimate the impact of Conversion on utilization of Government capacity.	
11.9.1	Determine what will happen to the existing work center if a contract is awarded. -- Will it be completely idle? If so, go on to Step 11.9.2. -- Will it operate at reduced capacity? If so, go on to Step 11.9.3. -- Will it operate at the same or increased capacity? If so , go on to Step 11.9.4.1.	V.F.
11.9.2	Determine whether work center facilities will be disposed of or placed in a standby status.	V.F.2.
11.9.2.1	For facilities which will be	V.D.

	disposed of, calculate the opportunity cost to be added to the Government's in-house estimate.	
11.9.2.2	For facilities that will be placed in standby status, estimate standby costs to be added to the costs of contracting out by following Steps 11.9.2.3 through 11.9.2.5.	V.F.2.
11.9.2.3	Estimate the cost, if any, of preparing facilities and equipment for standby status.	IV.F.3.
11.9.2.4	Estimate the cost of holding facilities and equipment in a standby status (standby maintenance cost). This should include depreciation.	IV.F.
11.9.2.5	Add preparation cost (Step 11.9.2.3) to standby maintenance costs (Step 11.9.2.4) to determine total estimated standby costs. Enter this amount in line 14.	IV.F.3,4
11.9.3	Determine costs attributable to underutilized capacity.	V.F.5.
11.9.4.1	Estimate the proceeds or costs of disposing of any Government assets related to the replacement product/service.	V.F.3.
11.9.4.2	Estimate the rental costs which will be avoided as a result of transferring the replacement product/service.	V.F.3.
11.9.4.3	Add final totals derived in Steps 11.9.4.1 and 11.9.4.2 for total savings (or total additional cost) resulting from transferring the	V.F.3.

	replacement product/service. Enter this total in line 24.	
11.10	Estimate the amount of Federal tax payable on the contract price. Enter this amount in line 27 as a deduction from the cost of contracting.	IV.G. Appendix 1
11.11	Estimate any other costs of contracting out. Enter the total amount of such costs in line 26.	V.H.
11.12	Estimate any other costs which should be <u>deducted</u> from the cost of contracting out, but are not covered by any of the Handbook's classifications of costs. Enter the total amount in line 29.	V.H.
11.13	Determine the conversion cost differential (if applicable).	VI.B.
11.13.1	Follow steps 1 through 6 in text paragraph VI.C.3.	VI.C.3.
11.13.2	Enter the conversion cost margin (i.e., the personnel-related cost margin calculated in Step 6 of VI.C.3.) in line 32 of the Form.	VI.B.2.